



Visuals of food

How images shape our perception of food

Jakob Petersen

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ABSTRACT

Tampereen ammattikorkeakoulu
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Degree Program in Media and Arts
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Jakob Petersen:
Visuals of food: How images shape our perception of food

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Food is a crucial part of our lives and identities. Plenty of factors influence our eating behaviors, among them there are images or visuals. The aim of this thesis was to give an idea in what way and to what extent images especially influence our diet and perception of food. Additionally, research results would help setting the framework for an art project connected to this thesis. First, elements of food images and their purpose were determined with literature, articles, expert opinions and own experiences. Second, over a period of three weeks 110 food advertisements were collected in the public of Helsinki and Tampere. Those were categorized into content, alteration degree and healthiness degree. Afterwards, they were semiotically analyzed to determine what impact the random image sample could have on the public. A major part of the sample showed unhealthy food. People were guided towards an unhealthy diet on-the-go. One would need to take their time to eat healthier. However, concrete evidence and further research is needed, for example in the form of surveys.

Key words: food, advertisement, photography, art

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1. INTRODUCTION

Centuries ago, plethora of food was meant for nobility. However, through the huge availability in supermarkets it has become a much bigger part of everybody's lives and identity, according to the German nutrition psychologist Prof. Christoph Klotter (2018). But this results in a great disadvantage: our consumption (especially animal products) and food wastage (Food and Agriculture Organization of the United Nations 2012) have a greater environmental impact than before. Several factors influence food choices and eating behaviors. People consider price, health benefits, ethicality and locality of the food purchased. Industry has noticed and therefore highlights it in the form of text elements. Yet one of the most significant factors stands out: visuals or images. They shape our perception of food even before we come in contact with it. Since our diet affects our environment and images act so early in the process, it is imperative to take a look at the severity of the impact.

The author and art history professor Kenneth Bendiner wrote in his book "Food in Painting: From the Renaissance to the Present" (2004) about how food has been a center element in Fine Arts for centuries and, furthermore, its function and symbolism. Nowadays, through modern media like photography and film, food is not only displayed in museums and private galleries, but everywhere in public. Also on internet it is omnipresent in the form of advertisements, food blogs and social media. It has become the discussion topic of innumerable articles, forums, documentaries and social media posts.

In the second chapter of thesis research, elements of food images and their effects will be identified and evaluated. Literature, articles, professional opinions as well as own experiences will be taken into consideration. In the third chapter, a public image sample of 110 images was collected over a period of three weeks (08.02. - 01.03.2019) in Helsinki and Tampere. The collection included certain rules. This sample was categorized and semiotically analyzed to determine possible effects of food images on our diet and perception of food (Rose 2013). In conclusion, the main research question "How images shape our perception of food" was answered. Furthermore, whether presentation correlates with healthiness and quality of food. The research results also set the frame-

work for a photography art project connected to the thesis. Eventually, a small look into the future was taken and how future food can be made more attractive through images.

2. HOW IMAGES SELL FOOD

If food shall be the main subject of an image — be it on social media, posters or TV-spots — it is in the interest of the producer to present it in the most attractive and delicious way possible for a personal goal (new buyers, product or brand loyalty). The final image, even though it might contain multiple manipulations, will influence viewer's food choices and their expectations on the food (Spence et al. 2016, 53-63). If it shall not meet these expectations at the shopping site, it is likely to be rejected. Especially in food advertisement industry several methods and tricks are used in order to present the "*hero*" (term for the product to be sold) in its best way.

Delores Custer, an American food stylist who has been working in food styling for over 40 years, published her book "Food Styling: The Art of Preparing Food for the Camera" (Custer 2010). There-as one can find the most common used techniques during photo shooting to present sweet and savory products, as there are burgers, ice cream, chocolate, beer, soft drinks, vegetables and fruits to name just a few. Although the book itself targets more towards the American advertisement industry, most of the described techniques, which are familiar to me, are applied and commonly used by food stylists internationally. At 747 Studios in Hamburg, Germany, a company specialized in food and non-food advertisement (as well as VR and CGI), I had the chance to gain some food styling experiences during my four months internship in 2018.

At first, this chapter addresses the most common techniques used to make food more appealing in images. Secondly, it examines the relationship between the character of an advertisement and ethical and substantial product qualities. All this will build the foundation of image analyses in chapter 3.

2.1 Food styling and other techniques

A food stylist's job is to render ingredients or a dish as appealing as possible for the camera. During the shooting, he also keeps its appearance fresh for an extended period of time. Even though he simply often follows the orders of producer or client and has to remain as close to the original product as possible, he still has plenty of choices in execution. Besides the photographer, he is one of the strongest influence in shaping the perception of a food.

Food stylists brush foods — especially meats or grilled products — with oil to let it appear as freshly made as possible. There-as, the so prepared food looks juicier and fattier, suggesting to be a product of high nutritional content. Sometimes, the oil is mixed with herbs or spices to give the appearance of a marinade. A secondary benefit is that this technique prevents oxidation for a long period of time, which is desirable in an environment where food might be on set for multiple hours.

Whenever fresh appearance is desirable, e.g. for fruit and vegetables, a mixture of glycerin and water is applied by a little sprayer. It leaves tiny droplets on the food, giving the impression of a cool, untouched and fresh product. The ratio of glycerin to water depends on the desired drop size; more glycerin produces larger drops. This technique is also used for beverages. Applied on the glass or bottle, it gives the impression of condensation and a chilled, freshly poured drink.

Another way to enhance visuals is to sprinkle coarse salt, crushed black pepper and freshly chopped herbs over the food. This suggests that it is about to be prepared, cooked or consumed. It gives the impression of a well seasoned and palatable product. Other garnishes such as lemon slices, spices and peels, can contribute to the desired mood. They add another degree of playful randomness, which is usually the preferred look in food images.

There are also multiple heat-related ways to improve food's visuals. The technique chosen is based upon the desired look. For example, blanching vegetables enhance and preserve their natural colors. Sometimes, a little vinegar is added,

as it boosts the colors even more. Searing a steak in a hot pan and adding grill marks with a heated metal skewer give the impression of the food being prepared in a rustic way, like a charcoal grill. The *Maillard reaction* is worth to be mentioned here, as it plays an important role in enhancing a food's visuals and flavors by caramelizing the natural sugars, thus browning.

In images it is difficult to convey the texture of foods, especially the smooth and creamy ones like yoghurt or chocolate spread. Therefore, food stylists apply a couple of wavy or circular swirls to the product, which enhances visuals. Thus, it gives a better impression of the texture pronounced. In film, slow motion is often used to create this effect. The slower the film, the creamier and richer the food appears (Welt der Wunder 2012). Along with some fruits that break the tensioned surface, it immediately appears more delicious.

Food stylists prefer to arrange the product in a slightly random looking manner on the plate. It is supposed to appear as if an everyday consumer plated it. Additionally, this adds a degree of playfulness to the food, as if the creator had great fun putting the dish together. The artistic enjoyment translates directly into consumers satisfaction, as a study about artistic visual presentation proves (Michel, Velasco, Gatti, Spence 2014). However, food being arranged *too* perfectly can make it less appealing to the average consumer.

The amount of food shown in an image can have a tremendous impact on the viewer's perception of food and the amount eaten. Growing portion sizes are directly related to a raise in obesity rates, as a study of the American Journal of Public Health (AJPH) stated (Young & Nestle 2002). In addition, food portion sizes (especially large ones) in photographs can be underestimated easily (Atkinson, Darbyshire & Nelson 1994). As a consequence, many clients are very strict in not showing more than the recommended portion size in the image. The food stylist must be careful to not overload the image, except if a sumptuous look is desired.

Different lighting, background styles or props associated with, for example, a certain country, cuisine or culture, can enhance the image's impression significantly: The viewer sees food representing a certain environment and emotion. A

positive feeling towards the food is created. As an example, pizza often is shown as sharable food (multiple hands take a slice each) in a warm light. This acts as a placeholder for a good time, socialization and summer. Asian food is usually presented in tropical light with chopsticks, clay dishes, bamboo mats, sometimes letters, as a connotation to an exotic, exciting culture. Although many of these images are packed with stereotypes, it is often the combination of viewer's expectations and an actual representation of a situation or culture.

At this point, two psychological aspects are to be mentioned: 1. the *illusory truth effect*, that is the "tendency to believe information to be correct after repeated exposure" (ScienceBlogs 2007), suggesting a possible way how these stereotypes and expectations are built and 2. *processing fluency* or how easily information is processed. Familiar and simple information, such as previously seen imagery is easier processed than overwriting it with new, updated information. This is a possible reason why it is so effective and, more important, results in the favor towards the specific food or brand (Hesterman & Horan 2017). Simple information with good processing fluency is even more likely as being perceived to be true (Reber & Schwarz 1999).

2.2 Deli vs Dining

There is an interesting correlation between the sheer amount of advertisement or images of a food and actual quality and nutritional value of the presented food: This can be noticed especially in two extremes: on the one side simple snack bars (delis) or so called "fast food" and finer dining restaurants on the other. Chains like McDonald's and Burger King rely heavily on their marketing and their perfectly styled images (McDonald's 2012) while offering cheap, but strongly processed products rich in calories, low-quality fats and sugars (McDonald's 2017). The success of these chains is certainly not only due to their advertisement, but it is a major factor. The food components need to be in a state of preparation where the only work to do is heating and assembling them. This lowers production costs, but comes along with a decrease of ingredients purity and nutritional value. For example, in the USA, McDonald's fries contain some 19 ingredients (six in Germany). Many of which them extend their best-before

date, improve visuals or make processing it easier and safer in the kitchen (Simplicissimus 2018).

On the other end of the spectrum one can find fine dining restaurants and handcrafted food (e.g. artisan bread). Very little image production is done, even at its sites there is little to no imagery found. Actual marketing is mostly mouth to ear communication. Crafts and dishes take time and their creators often call themselves “artists“. Developing a recipe and implementing it into the kitchen can take months, sometimes years. Food’s price and its nutritional value as well as longer preparation time reflect this. For example, artisan sourdough breads — double to triple as expensive as normal supermarket breads — are much healthier and easier digestible due to their content of lactic acids. But developing these flavors, probiotic properties and a naturally long shelf life (due to the higher acidity content) takes up to three days. In comparison, simple, white pan bread with a relatively short shelf life (which often is extended by additives) takes only a few hours (Suas 2008).

In fine dining restaurants, where almost no food-related images are found, food is at a point, where nutritional value becomes less important. The abstract and artistic concept steps into foreground. For example, Heston Blumenthal’s dish “Counting Sheep“, containing two pieces of tender meringue lying on top of a floating pillow, took him nine months to perfect it, while he had been developing its concept for as long as 15 years. This work and its artistic value is reflected in its price, too: A set menu at Heston’s restaurant “The Fat Duck“ is currently priced at £255 (294€) — excluding drinks.

Even though this can’t be adapted to every food, cuisine and country, lower prices and a great amount of imagery and advertisement go along with the cost in a lack of nutritional value and craftsmanship in general. On the other hand, higher prices and less to no imagery often mean greater involvement of handicraft, high quality ingredients and artistry.

2.3 Visuals of food

When it comes to presenting food in an image, the producer has multiple options to increase its positive connotations by manipulating the image:

1. On set: arranging the food in a pleasant way, full of freshness, beautiful lighting and connoted props. Food stylists also can use oil, garnishes, heat, swirls etc. to improve the food's visuals.
2. By editing: other positive aspects, such as low price, health benefits and origin can be emphasized with text elements. The final goal is to influence the customer by evoking the desired emotion and to suggest a sustainable background and benefit for one's health.

It looks like there is a correlation between the amount of images presented and its nutrition quality. Even though this might not be adaptable into every case, in general, the more images there are shown — the more likely the product is of no good to its consumer. An overdoing of promotion can even lead to disinterest. Vice versa, the less images are shown, the more likely the product is of art, handcraft and high nutritional value. Images appealing to our "visual hunger" (Spence et al. 2016) — since they break the original food into mentally more palatable portions — can be seen as the first step of ingestion.

3. CASE: FOOD IN ADS

After examining food images and their elements to alter perception of food in theory, it is important to analyze how they are implemented in reality. For the sample, 110 images were collected in public and chosen by these features:

- Food must be the main object of the image (food advertisement, restaurant food). It must be clearly visible and a substantial part of the image.
- Only images in public places (streets, cafés, shopping malls) are to be picked, since they target the largest group: general public.
- No packages are allowed, since package design is another whole industry sector too large to cover in this analysis.

- No images from social media and/or internet, because images shown there vary from person to person due to algorithms. This would distort results.
- Duplicates were not taken into consideration, since they are not helping to answer the main questions.

This chapter categorizes the random sample into three groups:

1. Image contents
2. Degree of alteration and manipulation of the food and image
3. Health benefit of the food shown.

Under the topic of thesis main question “How images shape our perception of food?” the taken images were summarized into different charts.

3.1 Image contents

The random image sample is categorized into the following groups:

Examples of category: Fast food (burgers, pizza, hot dogs, milk shakes, big sandwiches)



PICTURE 1, 2, 3. Fast food examples

Examples of category: To-go (small pastry, small sandwiches, small salads, coffee)



PICTURE 4, 5. To-go examples

Examples of category: Café/lunch/breakfast (cakes, tarts, pastry, breakfast food, lunch food)



PICTURE 6, 7, 8. Café/lunch/breakfast examples

Examples of category: Restaurant food (steak, salmon tartar, meze platters)



PICTURE 9, 10. Restaurant food examples

Examples of category: Product images (fairly neutrally presented product)



PICTURE 11, 12, 13. Product images examples

Examples of category: Home made food (recipes)



PICTURE 14, 15, 16. Home made food examples

Each image was placed into the category that described it best. Some foods fit into multiple categories (e.g. milkshakes fit into *fast food* and *to-go*), those were placed into the category which fit the context the food was presented in (a milkshake presented as a To-go food was put into the *To-go* category). The results of the first categorization are summarized in Figure 1-1.

Twenty-one images (19%) of the sample showed *product images*. This was to be expected as supermarkets and brands want to sell their products. It shows food and ingredient options to purchase. Thus it can influence the consumer's grocery shopping to a certain extent.

Fifteen images (13,7%) of the sample showed *home made food* or recipes, which are supposed to encourage people to prepare meals themselves, test out new flavors and in general develop their culinary skills. Those images were found mostly around or in supermarkets, where ingredients can be bought easily. On-the-go in public — with little to no time to prepare food themselves — most of those images are likely to be ignored.

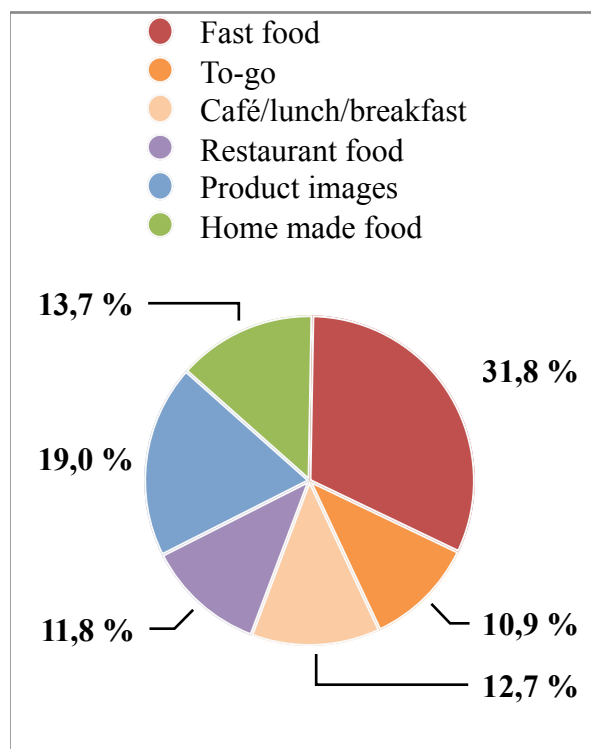


FIGURE 1. Random sample categories

Thirty-five images of the sample (31,8%) showed *fast food*. With an additional twelve images (10,9%) out of *To-go* and 14 images (12,7 %) out of *Café/lunch/breakfast* altogether 61 images (55,4%) of the sample were showing food that was supposed to be consumed quickly. Besides the economical interests of cafés, snack bars and fast food chains, it is likely that images shown do affect the choice of food we consume when we are busy and don't have the time to prepare it to ourselves: food we don't know all ingredients of, could contain for example additives. Therefore it could be less beneficial than home-prepped meals. Not every food on-the-go and outside home kitchen is automatically unhealthy, but it has a tendency to be. Subchapter 3.3 further examines the healthiness of the sample.

Thirteen images (11,8)% of the sample showed *restaurant food*, for example salmon tartar, roast chicken and meze platters. This relatively small number supports the hypothesis, that less imagery correlates with a higher quality of food. Higher numbers might lead to a drop in food quality.

The higher percentage of fast food images, in addition to *Café* and *To-go* food images, can be found in public places. This can distract consumers from healthier alternatives and from preparing food themselves. Fast food and To-go food seems to be the most available option to consumers. A small percentage of home made food images is encouraging, but should be increased to achieve a better culinary education to the public.

3.2 Degree of alteration and manipulation

The random image sample is categorized on a scale from 0 to 4 with following degrees:

- 0: food is neutrally presented and not manipulated. It looks the same in image and store.
- 1: food is mostly neutrally presented and very little manipulated. It looks mostly the same as in store.
- 2: food is styled to a balanced degree between neutral and manipulative. It is still recognizable and realistic.
- 3: food is noticeably styled and is less recognizable.
- 4: food is heavily styled and/or presented in a strongly manipulative way. It differs significantly to the product in store up to the point of no recognition.

“Manipulation“ and “styling“ mean the amount of food styling and prop styling as well as lighting and editing that went into the production process of the specific image. Furthermore, the question is asked to what degree the certain image is trying to provoke emotions in order to pursue consumers to buy this specific product. Results are presented in Figure 1-2, where y = amount of images and x = alteration degree. First, the graph is being analyzed as a whole and second, the individual degrees from 0-4 are being examined in detail.

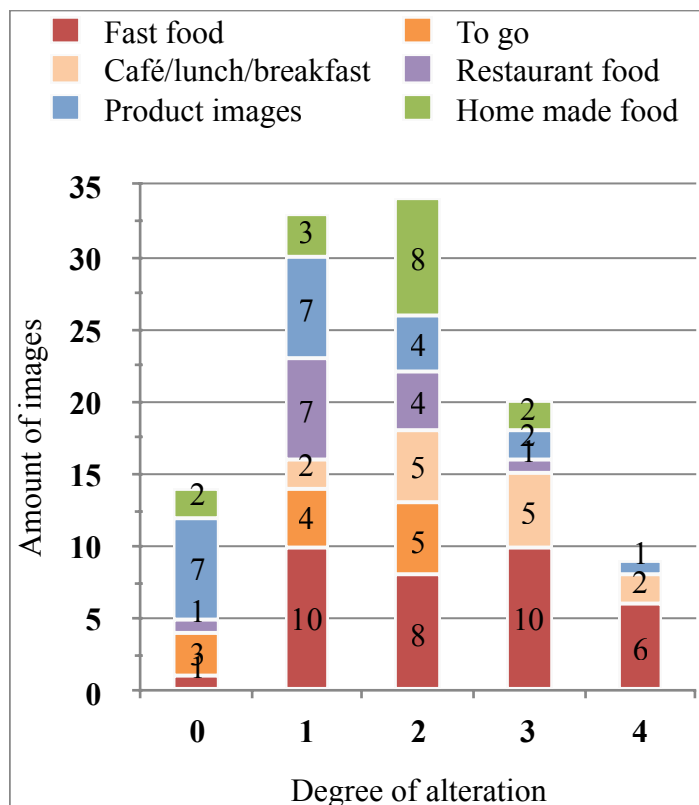


FIGURE 2. Degree of alteration throughout the sample

Taking a look at the graph as a whole, it becomes obvious, that most images of the sample (96 images, 87,7%) contain some degree of alteration. However, spikes are found in degree 1 to 2: the largest part of food is still recognizable and presented realistically (14 images in degree 0, 33 images in degree 2, 34 images in degree 2, 81 in total). This could lead to a more realistic perception of food.

A major part of degree 3 to 4 consists of fast food images — other categories are featured little to none. A noticeable amount is heavily altered, some of them to the point of no similarity at all. For example, burgers are stacked straight and perfectly and every ingredient is visible. Decoration on top of ice cream is carefully placed and composed. Often it is presented in spotlight, as a hero on stage, giving it the impression of grandeur and high quality. Single water drops on the vegetable ingredients and grill marks on the hot dog or burger patty stand for freshness. Water drops — to simulate condensation on glasses — represent

coolness and refreshing properties. All those visuals don't exist when receiving the product in store.

Especially fast food chains with higher budget (e.g. McDonald's, Burger King) use these methods aggressively. If foods are little altered, images usually come from lower budget snack bars. This explains the high amount of fast food images in degree 1 to 2. Usually, the fast food shown (especially burgers and ice creams) in degree 3 to 4 give the impression of a masterfully crafted sculpture rather than that of food. The impression is created that the consumer buys a high quality product. However, when taking a look at products in store, these expectations are not met. In addition to that the influence of "visual hunger" could be one of the explanations of the high amount of consumption of fast food. On a daily basis, 36,6% of the Americans consume fast food, especially the younger ones (Howard 2018).

To-go-food is more neutrally presented: Usually, it is shown on a single colored background. Sometimes, an impression of flavor and ingredients is created by scattering some decoration around the product. Images are fairly simple constructed and food is little altered. Snacks maintain a realistic image to show their availability at a good price.

Similar conditions are found in product images and restaurant foods: Products are presented on a single colored background. Sometimes, a better impression is given by showing a fruit slice or another simple application. Restaurant food is usually presented in the way how the customer should receive it in the restaurant. Sometimes, some props like fabrics are used sparingly to convey cuisine or nationality. Restaurant food images can be seen more as an invitation to visit the specific restaurant. They distort expectations and perception of food little to none.

On the other hand, café/lunch/breakfast images contain a noticeable degree of alteration. In general, a large variety of food is presented at once, for example croissants, spreads, juices, coffee, sandwiches. Referring to this sample, those as well as home made food images contain the highest amount of attractive playfulness (see chapter 2.1). Often some props like forks, knives, plates and

napkins are used to emphasize this. Warm, soft light is used to create a cosy atmosphere. In some cases (e.g. Fazer Café), a dark and moody light is applied, in order to create the impression of a more unique experience. Café food is presented as a relaxant, a moment to slow down and enjoy a good piece of cake, drink or sandwich. Given that people meet friends in cafés, study there or take a short break, this food image is not unrealistic, although it has been created by a larger amount of food and prop styling and lighting.

Most of the time, home made food images are those of recipes. They are playfully presented. Randomly, decoration and ingredients like flour, sliced almonds, chocolate chips and herbs are scattered around the food, which gives the impression of a fun time. Props like fabrics, bowls, knives, kitchen yarn are used. Bright daylight creates the picture of a comfortable home environment. One could argue this certain degree of alteration can be forgiven, since the consumer is encouraged to cook or bake at home. Moreover, to try out recipe or ingredient, albeit with sometimes unrealistic or unusual imagery.

3.3 Healthiness

On a scale from 1 to 5 which is based upon the Finnish food pyramid of 2015 (Picture 17), the random image sample is being categorized. Additionally, the German CAM doctor (complimentary and alternative medicine) Kirsten Luzie Kruse was consulted for help (Kruse, 2019), input and categorization. The degrees are:

- 5: food is rich on vitamins, fiber and minerals. It should be consumed plentifully (fruit, vegetables, lentils, spices, herbs). It is significantly beneficial food.
- 4: food is still rich on vitamins and minerals, but contains little amounts of elements that shouldn't be consumed too much, such as carbohydrates and desaturated fats. Therefore it should be eaten up to a more limited amount (nuts, grains, protein, starches). It is also beneficial food.
- 3: food contains a noticeable amount of less to be consumed elements (fat, sugar), but still contains beneficial substances like vitamins or polyunsatura-

ted fats (fish, meat, milk products, salads with protein). It is beneficial food, but should be consumed much less.

- 2: food contains mostly carbohydrates, saturated fats, salt and/or sugar and shouldn't be consumed often (sandwiches, pizza, burger). It has little beneficial value.
- 1: food contains large amount of sugars, saturated fats and/or chemicals (thickeners, stabilizers, artificial colors/flavors) and should be consumed only as a treat (sweets, chips, soft drinks, ice cream). It is of no beneficial value.



PICTURE 17. Finnish food pyramid (Aro, Terveyskirjasto 2015)

It is crucial to emphasize that one's personal diet or individual organic chemistry, thus a food's nutritional value are no simple topics. The recommended amount of calories, carbs, fats and protein intake varies depending on one's lifestyle, exercise, sex, age, weight and height. Even more, the complexity of sugars (mono- vs. polysaccharids), saturation of fats (saturated vs. polyunsaturated) and the amount of protein play a major role in a food being considered "less healthy" or "unhealthy": For example, a piece of salmon might be considered "healthier" due to its polyunsaturated fats than a smoothie which is often high in fructose, a fairly simple sugar. The amount to be consumed or exercise before also need to be taken into consideration: a pizza after workout is more beneficial than consuming it after sitting at a desk for multiple hours. A large, home made burger once a week might be more beneficial than a bakery croissant ea-

ten every single morning. For the sake of simplicity however, food shown in the image sample is treated as if it was consumed on a regular basis (more than two times a week). The scale below therefore is somewhat simplified and more of a general orientation than guideline. For the purpose of image analysis however, it is specific enough. The results are summarized in Figure 1-3 in which y = amount of images and x = degree of healthiness as defined before.

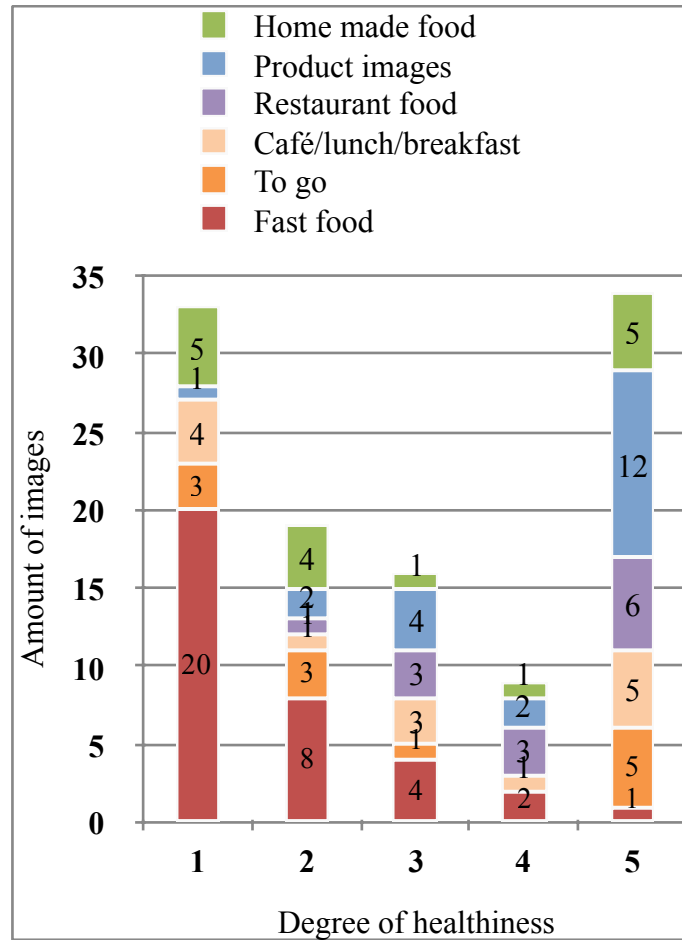


FIGURE 3. Degree of healthiness throughout the sample

The image sample contains a significant amount of images with unhealthy food, but also a noticeable amount of images with healthy food. The graph shows two spikes: one in degree 5 (34 images, 30,9%) and one in degree 1 (33 images, 30%), followed by degree 2 (19 images, 17,3%) and 3 (16 images, 14,5%). The least amount one can find is in degree 4 (8 images, 7,3%). Overall, the food shown in this sample shouldn't occupy a large part in one's diet. It is more likely

that consumers will choose unhealthy food, if images in large numbers draw attention.

Depending on what consumers choose to eat and how often, it will have an impact on their health. It is of no surprise to find such a high number under the less healthy degrees. Almost a third of the sample consists of fast foods like pizza, hot dogs, burgers, club sandwiches and ice cream. All of them rich of saturated or trans fats, simple sugars and carbs. Overall, the lower the degree, the larger its share of fast food. Other, smaller shares consist of cakes from cafés, milkshakes and sweet buns to go. One also finds home made cakes, which still are unhealthy, but often rather treats than whole meals. They are more likely to be consumed not too often.

On the opposite, however, there is the restaurant food, which takes a larger share of degree 5. On this end of the spectrum, one frequently finds vegetables and fruits just to mention onions, apples, bell peppers, tomatoes, cucumber and salad. Moreover, one can find home made food like salads and vegetable snacks or products with larger amounts of seeds and nuts such as granola, smoothie bowls and whole-grain sourdough bread. Degree 5 shows clearly, that healthy and beneficial food is available in every category, but not as numerous as unhealthy food. To draw a conclusion: The higher its degree, the rawer and less processed the food shown is. Product images of food to be cooked and eaten at home show mostly healthy options. The healthier a meal, the more the consumer is encouraged to prepare it himself at home or consume it in a place where it is prepared with more care (restaurants, lunch places). On-the-go and during busy times however, people are mostly seduced to consume unhealthy food and snacks by images.

3.4 Analysis results

Semiotic image analysis suggests, that the effect of food images on our diet and perception of food is significant: the unhealthier a food, the more images evolve away from the product itself. This is most noticeable in fast food. Raw or little processed foods like to retain a more realistic image. A larger part of the image

sample showed food that should be consumed as little as possible considering one's health. As a result of our accelerated world, people were guided by images towards an unhealthy diet on-the-go.

In order to estimate the necessity of counteraction, it is most important to gather reliable data to achieve an impression on the effect of images on food consumption. Further research is needed, e.g. a survey about how many people actually choose to eat or buy a food because of its image. Besides images there are other factors that influence one's diet, such as prices, convenience, locality, ethicality, personal heritage, personal values and habits, etc. This needs to be examined in further research as well.

4. CASE: FOOD IN ART

After my four months food styling internship at 747 Studios from January 1st to April 31st 2018 in Hamburg, Germany, I was eager to apply the acquired skills at my final artwork, which is connected to this thesis. Living vegan for about a year and a half, learning more about mass production of meat and animal abuse, I decided that meat was to be the main subject of my artwork. To me, "just" to photograph a styled piece of meat felt to be too simple. Even more, since I prefer to include elements in my artwork that invite the viewer to look at it from a different point of view. This led to my "vegan twist": I would use the same methods as industry (in order to get people to eat a certain food), but with an ecologically more sustainable intent. The pieces of "meat" would be fabricated solely from plant products, each presented in its own still life. The desired impression would be enhanced further through appropriate props, food styling and editing. The idea was, that initially the viewer was supposed to get the impression of meat in the photos, but when getting closer would realize that this was not the case. Thus to lead the viewer to look at meat from a different angle. At its best, to initiate a conversation about animal product industry and alternative diets.

4.1 Preparation

At start, some tests were necessary to determine plant components of three to five different kinds of meat. Because of my internship experience, I already had some ideas of what might work. The first plant “meat”, a steak, was made of finely grated potatoes, colored by beetroot juice with a splash of lemon juice to prevent it from discoloration by oxidization. The white fat streaks were made of white mushroom. These, as found out in a test, better had to be cut individually rather than grated. After a few hours, even with larger amounts of lemon juice and an oil coating, the “steak” discolors. So it had to be prepared on the spot.

The second plant “meat”, a salmon fillet, was made out of carrots and radishes, based upon a recipe for “porkkala” (from “porkkana” = carrot and “kala” = fish in Finnish). The orange “meat” parts and white fat streaks were also thoroughly cut. Then they were assembled to what would look like a salmon fillet. To make the assembling easier at photo shooting, fillet was divided into four smaller parts. It was easy to be prepared ahead, since there was no discoloration even after being stored in the fridge for a day.



PICTURE 18, 19. Test results

Initially, for the third plant “meat”, I thought of chicken. However, I had to drop this idea, since I couldn’t find a plant product that looked somewhat like chicken. Instead, lamb chops were chosen to be the third and final plant meat. The same mixture of grated potatoes and beetroot juice for the base and white mushrooms for the fat streaks were used. For the “bones” I applied parsnip,

carved into a bone's shape. It was attached to the meat with tooth picks, a versatile tool of food styling.

4.2 Photo shooting

The day before photo shooting, the “salmon fillet” had to be prepared in order to save some studio time. “Steak” and “lamb chops”, however, had to be prepared on the spot. In addition, plant “meats” were presented in a raw condition, since pan searing results in looks that differ from that of really seared meat. Photos and food styling, however, were tackled as if I was working with real meat. This way, props and food styling was similar and the impression of true meat was enhanced even further. An old metal plate — often used as a background for meat presentation in food styling — was borrowed from Gallery Himmelblau, Tampere, Finland. Because of the contrast between the dead, cold metal and the natural, alive meat, it pops up the meat. In addition, this gives one a rustic, old fashioned market feeling, accompanied by some unease and coldness — which works well with the topic of meat consumption.

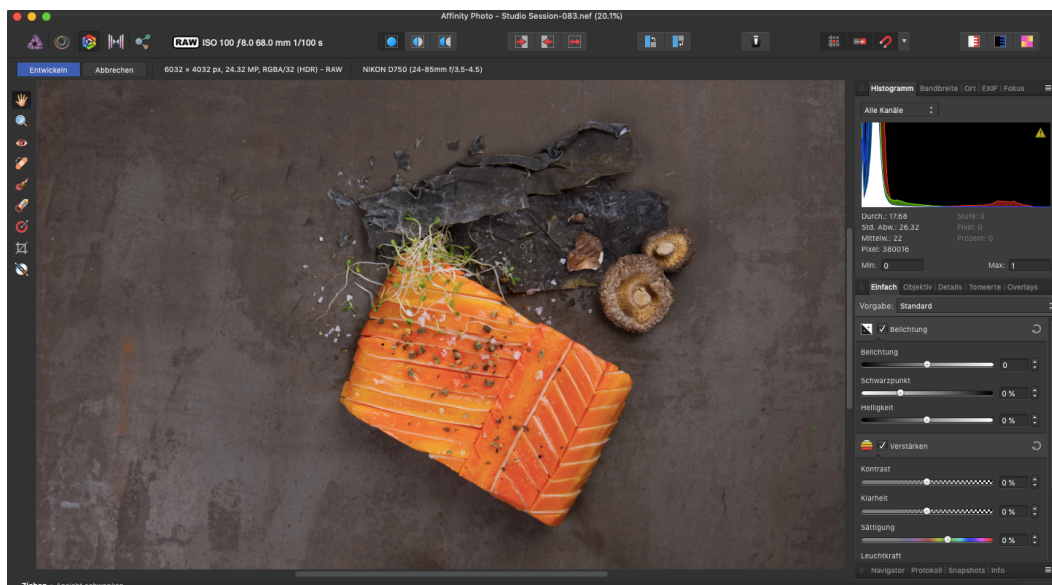


PICTURE 20. Photo shooting

From there on, it was a straightforward production. My co-student Ina Martmann assisted me during shooting, so I could focus on food styling. The plant “meat” was put on the background. It was decorated with some ingredients that harmonize with its flavor and could also go along with real meat. During thesis research, I learned to appreciate the Japanese diet culture, so I mainly chose Japanese ingredients. Furthermore, to draw some attention to cuisines other than our European. Finally, a thin coating of oil was applied to imitate the fattiness of the “meats”. After shooting one plant “meat”, an alternative second version was shot. Here the “meat” was torn apart slightly and plant components would become more apparent. In the end, however, only the torn “steak” made it into the final series.

4.3 Postproduction

Food styling works only up to a certain point without over engineering. At this point, postproduction steps in, for which I used the image editing software “Affinity Photo”. Here, the two main tasks were to adjust colors as close to real meat as possible and to close holes and gaps in the plant “meat” with the Repair or Stamp tool. In the end, the four photos of series were supposed to harmonize with each other. This was achieved by using the same preset for all four RAW images. Also, light and saturation values were adjusted to achieve similar histograms.



PICTURE 21. Editing in Affinity Photo

In the end, photos were cut into equal squares since the subjects had already been centered. This enhanced the still life format further. Moreover, since Instagram the square image format has become more contemporary, again. Now, photos were printed by the large scale EPSON printer at Mediapolis Tampere, which reproduced the colors of my home screen accurately. As a next step, photographs were put into passepartout frames with a taller frame — to simulate the edge of a plate. They were exhibited from 04.-28.04.2019 at Gallery Himmelblau in Tampere, Finland. The Finnish titles of the individual works are a mix of its main ingredient and the meat it's imitating:

- “Porkkala“ from “porkkana“ (carrot) and “kala“ (fish) — see appendix 2
- “Perunauta“ from “peruna“ (potato) and “nauta“ (beef) — see appendix 3,5
- “Nauritsa“ from “nauris“ (root) and “karitsa“ (lamb) — see appendix 4

The title of the series is “Piilossa“ (“Hidden“ in English).



PICTURE 22. Exhibition in Gallery Himmelblau, Tampere

During this art project, to me it was possible to connect modern media, advertisement and traditional art in a harmonic way while staying close to the thesis' topic. I could improve my food styling skills. Moreover, it encouraged me to think even more creative to achieve the impressions desired. Prearrangements were more important than ever. Therefore, it took longer than other comparable food styling projects. However, once the theoretical foundation was built by the-

sis research, brainstorming and planning, the whole project turned into a straightforward path of actions that could be processed quickly.

Nowadays, since food and diet has turned into a significant part of ones identity, questioning it and sparking a conversation about its environmental impact, ethicality and nutritional value is more crucial than ever. With the means of my art project I am positive to have achieved this goal in a peaceful and constructive way.

5. CONCLUSIONS

The main research question “How images shape our perception of food“ can be answered in many ways. Images and advertisements can influence our diet and perception of food significantly, especially on-the-go. Food can be heavily altered, particularly if the presented product is of no good to its customer. Several food styling techniques are used as well as props, backgrounds and lighting. During postproduction other elements such as text, banners and logos are added to enhance the image further. Thus to strengthen the impression that a quality product has been purchased. Each element and food styling technique has its specific purpose and effect. By semiotic image analysis a correlation can be observed: in general, the less imagery of food is shown or the less food is altered in the specific image, the healthier and more beneficial it turns out to be. It has a realistic and little distorted image. Vice versa, poor food quality is masked by the excessive use of food styling, editing and advertisement. A heavily distorted perception of food is created, especially in fast food and other foods rich in calories, sugars and fats.

If one wants to consume healthier products, one needs to pay more attention and take the time for it, either in the form of quality restaurant visits or home cooking. Less time is needed to consume unhealthy food. The images of the sample only underlay this hypothesis. Making healthy, quickly to be consumed food and snacks more available. This can be supported by calling attention to it in the form of images. Japan is an outstanding example for healthier food being as available and convenient as unhealthy food. It is frowned upon to eat while walking, which forces Japanese to take their time for eating. One of the results

is a very low obesity rate of 3,5% (What I've Learned 2018), whereas in the USA it's almost 40% (Hales, Carroll, Fryar, Ogden 2017).

Another interesting point to me is that overdoing promotion of a food or product by images can lead to disinterest or even satiation towards it (Vedantam, Inskip 2014). In a time where people are constantly exposed to food and food images in public, especially on internet and social media, this results in an interesting tension between food becoming a much larger part of our identity (Klotter, 2018) and disinterest caused by overexposure. Often, consumers see images of the specific food before they even get in touch with it. Those images are appealing to our "visual hunger" or "eating with our eyes", while simultaneously putting a distance between us and the product itself.

Immanuel Kant described this difference between the "thing-in-itself" and our observation of it. Albeit of philosophical nature, it is not unreasonable to apply this concept upon images. They act as further hurdle between the "thing-in-itself" (the food) and observation (consumption) and could be perceived as another, strong distortion factor, given the results from 2.1 and 2.2.

5.1 A look into the future

Food industry needs to develop solutions. Furthermore, find ways to make them available and attractive to consumers. For example, lab-grown meat and insect products already do exist, but are not available neither in Germany nor Finland. One of the reasons is high costs (a lab-grown meat patty costs about 5000€ in production), another might be unfamiliarity. Advertisement industry should find ways to make these foods far more attractive to consumer. Through my thesis art project I contributed my part to that cause by introducing more sustainable, healthier food (vegetables) in the shape of other familiar food (red meat and fish). Industry could take up this idea and advertise unfamiliar, but environmentally friendly food to consumers more often. All in the shape or as an ingredient of for example bread, burger patties, soups, salads etc. This could be a significant step into a better and healthier future.

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APPENDICES

Appendix 1. Titles of artworks and statement

Porkkala

with shoots, shiitake mushrooms and kelp

Perunauta I

with scallions and black garlic

Nauritsa

with enochi mushrooms, miso paste and scallions

Perunauta II

with scallions and black garlic

Piilossa (which means "Hidden" in English) deals with the question of how big the impact of visuals can be in the liking of a food. It shows plant-based products camouflaged in the shape of several different meats in order to spark a conversation about excessive meat consumption and its alternatives.

The imitations are presented in a rustic and dramatic environment — a common choice for the display meat in advertisement industry — with typical Japanese ingredients to give attention to cuisines and ingredients other than European.

Appendix 2. Porkkala



Technique: Photography, archival pigment print, framed

Size: 30 x 30 cm

Year: 2019

Appendix 3. Perunauta I



Technique: Photography, archival pigment print, framed

Size: 30 x 30 cm

Year: 2019

Appendix 4. Nauritsa



Technique: Photography, archival pigment print, framed

Size: 30 x 30 cm

Year: 2019

Appendix 5. Perunauta II



Technique: Photography

Size: 30 x 30 cm

Year: 2019