Enjoying food with eyes:

Visual hunger concept on gastronomy lovers

Monika Pretty Aprilia, S.I.P[a], Dr. Irwansyah, M.A[b]

[a]*Departemen Ilmu Komunikasi, Fakultas Ilmu Sosial dan Ilmu Politik, Universitas Indonesia, Jakarta, Indonesia, (021) 3156941, monikaprettyaprilia@gmail.com*

[b]*Departemen Ilmu Komunikasi, Fakultas Ilmu Sosial dan Ilmu Politik, Universitas Indonesia, Jakarta, Indonesia*

Abstract

Food can be "enjoyed" visually. Current technology makes human can "enjoy" the visualization of food without restrictions of time and place. People easily on "enjoy" food by just noticing to its pictures in social media. In many previous studies show that food pictures in media attract people. One of the concepts is visual hunger that describes an individual's exposure to food images result their natural urge to notice food images and subsequent array from neural, behavioral and physiological responses on somebody. Visual hunger appears even there is an absence of hunger. This study aims to see people's way of "enjoying" food from the visual (photos or pictures) that appears in Instagram. The study was conducted by in-depth interview on informants living in major cities in Indonesia. The research shows that informants not only see food photos, but also find enjoyment too. There is a desire to taste the food because of the interesting display of photographs. Not only showing the desire on food, the three informants also justified that they are interested in high calories food pictures than the low fat one.

Keywords: enjoy; food; photo; Instagram; visual hunger;

1. Introduction

The growth of digital and audiovisual media technology makes people have easy access every day on the screen monitors such as smartphone, computer and tablet. In the last few years, the display of images in digital media continues to grow. One of it's growth is the resolution and sharpness of the color. The quality of the image results become an aesthetic appeal for images in digital media. The presence of Photoshop also complements the media technology to support the quality of the images (Spence, 2015).

Technological development is what makes the consumer's exposure to photo food becomes higher. This phenomenon is marked by people's obsession to the ritual of photographing food first before eating it over the last few years (Abbar, Mejova and Weber in Spence, 2015). Now, people can instantly upload food photos to social media such as Instagram, a social media that is specific to share stories through photos and video. Instagram account owners can edit photos and share photos by adding tags as labels and keywords, so the object of the image can be easily searched by other users. The application of Instagram is almost the same as Facebook's. Users can comment and "like" on photos that uploaded by other users (Holmberg, 2016).

In 2013, Instagram has 150 million active users with 55 million uploaded photos and 16 billion photos shared daily. Food is one of the most commonly uploaded objects in Instagram, alongside with selca, me and friends, activities, captions (photos with text, such as quote and meme), technological devices, fashion and pets.

.

Food images on social media become so popular. Even now food photos on Instagram began to function into a kind of advertising. Many people are interested to taste the food just by looking at it's picture on Instagram. Photographs according to Holmberg (2016) have a greater appeal than advertising. According to Beaver (in Holmberg, 2016), photo food greatly affects the brain activity of a person associated with appetite regulation. Charles Spence, et al (2015) also expressed a similarity with Beaver expressed through the concept of visual hunger. This concept reveals that exposure to food photos in social media and other digital media can increase a person's desire to eat. Spence outlines the concept of visual hunger as one's natural desire to see pictures of food. In research on human neuroscience shows that viewing food photos can lead to changes in neural activity, physiological responses, behavioral responses, and visual attention.

In the neural response change, the participant responds more quickly and also more accurately to high-calorie food photos than low-calorie food photos (Harrar, 2011). Participants reacted more interested to see photos of foods with high calories such as cheese or meat compared with foods with low calories such as beans.

Photographs of food not only cause changes in the neural side, but also affect the physiological aspects of a person. Participants have their saliva production (salivation) increasing. Besides that, participants have heart rate increases and changes in the chepalic phase that release insulin (Drobes et al, 2011). When a person sees a photo of the food, it shows that the desire to taste the food is indicated by the increased production of saliva.

While on the behavioral side, shown by research conducted by Ohla, Toepel, Le Coutre and Hudry (2012), which shows a change in food taste evaluation on the tongue of a person after viewing photos of food with high calories. The results showed a significant difference in the taste evaluation of participants after viewing photos of foods with high calories compared to after viewing photos of foods with low calories. Participants felt there was a desire to taste food after viewing a photo of high-calorie foods compared to after viewing photos of foods with low calories.

The concept of visual hunger also involves a person's attention to the visual display (image). Spence (2015) mentioned that the food is packed and served with an eye-catching look. In some cases, dishes are served according to aesthetic or artistic standards known as plating. With food photos that are organized can attract people who see it. It can even change their behavior in consuming food.

Research on food photos in social media has begun to be the focus of the study in recent years, especially after the emergence of various social phenomena. In a research that conducted by Hartman Group mentioned that there are various changes that occur when food began to "meet" media, especially social media (Hartman, 2012). These changes can be found on recipes that used to be delivered down by the family or from cookbooks. Now we can easily obtain recipes from internet or social media. We do not need to taste, to smell or to touch food in order to say it delicious. Just simply by looking at the website or social media, we can imagine the enjoyment of the dish.

This research is based on one of the phenomena. The research question in this study is, "how do people enjoy photos of food on Instagram?" The aim of the study is to see how participants do in viewing photos of food in Instagram and also the changes that they feel when viewing the photos of the food.

2. Method

This research uses constructivist paradigm that tries to construct the way in which informants enjoy food with the eyes. This study uses in-depth interview method with key words that appear on the visual concept of hunger, such as neural responses, behavioral changes, physiological changes, and visual attention (image).

Interview was conducted on three informants living in the big city. Informants were selected based on those who have Instagram accounts and view photos of food in Instagram frequently. Initially, there were 6 informants who had been interviewed. However, there are only three people that were selected for analysis because of their data richness. These three informants are culinary lovers before they had account in Instagram.

Interview with informants will be analyzed with an open, axial and selective coding process to discover and to explore visual hunger concept. The results of the study are interview with three informants and secondary data that related to visual hunger.

3. Result and Discussion

This research interviewed three informants who have Instagram account and often see photos of food in Instagram. The three informants are Intan (31) living in Yogyakarta and working as a graphic designer, then Nindy (27) lives in Yogyakarta, an architect. Then the third is Sari (33) who lives in Semarang and works for a non-governmental organization that concerns with mother and child issue.

Intan has an account in Instagram since 2014 and has followed Instagram account with food photo content since 2015. Intan loves to see photos on Instagram before going to bed at night, including food photos. She uses to open the explore section in Instagram. The explore section in Instagram displays various photos that not only uploaded by accounts that she follows, but also from related accounts that display food photos. Intan often finds photos of food complete with location and description of the price. The account that uploaded the food photos are referred to as foodie accounts. According to Crains, foodie is as someone who has a passion for eating and studying food (Vasques, 2015).

Foodie Instagram account becomes a reference for Intan in finding a place to eat. Some interesting photos of food are included the location description. Then Intan saves the photo and shares it with her friend, so that later she can visit the place when they decide to eat at there.

Contrary to Intan does, Nindy does not follow any foodie Instagram account. Nindy sees that all photos of food that uploaded on Instagram have the same "style". They have similar presentation on Instagram. Even though she does not follow any foodie account, Nindy can find photos of food at explore section in Instagram. She said that she just see food photos randomly in Instagram.

3.1   Visual Hunger on Gastronomy Lovers

This section will discuss about the way in enjoying photos of food in Instagram that done by the three informants. This research uses visual hunger concept by Charles Spence (2015). Visual hunger is a natural desire of a person to see food images which then involve the processes that occur in his body and brain system of neural (response), behavioral and physiological (Spence, 2015). Interviews conducted with visual hunger concept that already divided into four concepts: neural (response), physiological changes, behavioral and visual attention.

The first concept of visual hunger is the response that occurs when the informant sees food photos from the neural side. This concept is convicted by experimental research that conducted by Wang (2004). The results show that there is an increase in metabolism in the brain as much as 24% when participants are exposed to the smell and image of food. Similar research was conducted by Van der Laan (2011). The result of Van der Laan meta-analysis research was 300 participants showed a neural activation in their brain system when confronted with photos/food images. The results of a meta-analysis show an increase in their neural activity in some parts of the brain. Based on Wang and Van deer Laan researches show that the activity in the human brain is more active when they see photos of food.

In this study, the first concept is found on informant's responses when they see photos of food among other photos that uploaded on Instagram. The three informants had similarity in responding to the food photos that they saw on Instagram. They always interested in food photos that appear on their homepage as well as in explore section on Instagram even though they have no intention to see food photos. They always want to see the detail of food photos that look interesting. The phrase "interesting" refers to photos that capture high-calorie foods such as cheese, sausage, meat, various cakes, and others.

They are not really interested for the photos of food with lower calories such as fruits and vegetables except it has beautiful plating. Even they mentioned before that food with meat as ingredient is more tempting than food with vegetables. The three informants are not interested in food photos of Indonesian local food unless they were using beef or chicken as its ingredient such as sate or rendang.

Intan revealed that there are two things that make her interested to see details of food photos on Instagram. First is because it's her favorite food and second because these are high-calorie food. Her favorite foods are crab, sausage, cheese and matah chili (sambal matah). Nindy is interested in Japanese and Korean food besides cheese and sausage. Thus, the "interesting" food photo for the informant means a high-calorie food and their favorite food that can also be categorized as the high-calorie one.

The second concept in visual hunger is physiologically responsive. Spence (2015) mentions one characteristic of physiologically evident changes. The characteristic is when participants in the experimental test produce more saliva than usual as they are viewing food photos. In this study, three informants experience physiological changes that occur to them when they are viewing food photos on Instagram. They have a similar feature of change. They get more saliva production than usual. Nindy, as the one who likes to watch food art video in Instagram revealed that the excitement appears when she viewed the process of making cake with cheese and chocolate. Nindy calls food art video an entertainment to her. Intan had same opinion and claimed to be drooling when she watched melted chocolate in the video.

"Yes I was drooling, but I did not feel hungry. Especially when I watched chocolate or cheese melts. I think that kind of food (chocolate or cheese) or any kind of food that can melt makes me drooling. "

Figure 1. Chocolate cake as a food art on Instagram

The third concept in visual hunger is behavioral changes. Behavioral changes occur in the three informants when the desire to taste the food after viewing food photos in Instagram. The three informants have similar kind of food that makes them interested to taste it just by looking at the pictures on Instagram. Those are photos of foods with high calorie such as meat, cheese, chocolate and sausage.

The desire to taste the food after viewing food photos on Instagram emerges from their behavior. Intan, Sari and Nindy not just look at the food photos. The intention to taste the food is strong that they often directly search for the place to eat. Nindy and Intan even make a list of places to eat they wanted to go from the food photos post on Instagram. The same thing happened to Sari. She makes a list of places to eat that she will visit from Instagram's posts. They have a list to eat and arrange a schedule to visit the places.

The fourth concept is visual attention in food photos. Photos of food cannot make people immediately interested to see them. There are factors in the food photos that can make them look interesting to look at. Even tasty types of food cannot make people immediately interested to see them unless it's laid out (plating). The way food is served affects a person's perception of taste, alters his food choices, and his consuming behavior (Deroy, Michel, Piqueras-Fizman & Spence, 2014).

In the interview, the informants were asked of opinion about a photo of the food that uploaded on Instagram. They were asked wether they would like to taste it or not. The photo on Instagram showed a bowl of soto. All informants answered they are not so interested to taste it. But when they were asked for opinions about photos of food with cheese and chocolate, they said they were interested to it. Informants said that they pay attention to food photos that have beautiful food plating or lay out. Besides food plating/lay out, the three informants pay attention to food photos that show high-calorie food. High-calorie food is tempting for three of them.

Figure 2. A bowl of soto that was shown to informants

3.2   A New Way of Consumption Through Instagram

The above explanation shows the way the informants enjoy photos of Instagram foods that tend to be high-calorie food photos. The important thing to see is the three informants not just looking at photos of food. There is an enjoyment that brings them to the imagination of the taste when they viewed the food photos that is so tempting. All three informants often visit the place after seeing food photos uploaded on Instagram directly.

Intan, Nindy and Sari always save food photos on Instagram that attract them, so that later they can visit the place. They call it a "dining list". Intan even shares the photos through a private message to her best friend. Later on she and her best friend can visit the place together. This is what Intan and Nindy do.

> *"If there's a photo of an interesting meal and that is a new place, I'll share it with my friend. We'll try this place. I share in Instagram direct message so we will not forget. Instagram helps us to find new places to eat. "*

The extreme thing happened to Nindy, who often came to the restaurant at the same day when she saw photos of food uploaded on Instagram. Nindy claimed that she did not take a long time to decide wether she will eat at the place or not.

> *"It could be said that almost all the places I ate were from Instagram recommendations. I can check where to eat from Instagram now, and I can go there just in an hour after I checked my Instagram. "*

Nindy also mentioned that she uses Instagram as an eating place reference is not a special thing. It is a same thing when someone had to eat three meals a day. But the difference is she uses Instagram as reference to find a place to eat while the others maybe just need to cook it by themselves. Nindy does not live with her family but lives alone in Yogyakarta. Her job makes her lazy to cook so she chose to eat outside.

The presence of Go-Jek online transportation service in Indonesia since 2010, with Go-food service facility, makes it easier for them to taste the food. Sari has a habit when she saw photos of food on Instagram. Usually Sari directly checks whether the place is on the list of Go-food service. When she found the place to eat is in Go-food list, Sari did not hesitate to order the food she saw on Instagram. Then, food that she ordered would be delivered to her place.

The consumption pattern that occurred in informants was one of the changes of visual hunger. Hartman (2012) explains that people does not need to taste, to smell or to touch food first to make them interested. Only through visualization in social media the informants are tempted to taste the food. Even though the photos are so tempting, informants often get disappointment after they tasted the food because the taste was not as good as it's imagined. This is happened to Intan who often disappointed many times.

> *"I've been disappointed with the taste many times. What is important to me are the taste, the price and the service. I've been eaten in an expensive restaurant, but sadly the service is not good either."*

This visual hunger becomes a phenomenon that not only changes someone's consumption style. Spence (2015) describes the existence of new symptoms that exist in modern society. The main cause is not only about food industry does not care about consumer's health, but also the exposure of advertisements/photos of food and social media as one of the medium, become factors of this modern consumption style changes. Food industry and visual exposure cannot be dammed in the way of people's consumption now days. Two informants of this study, Nindy and Intan revealed about their choice of consumption that occurs because of visual hunger.

> *"Principally, my wallet is "screaming", but it does not matter because the important thing is my stomach is happy." (Intan)*
> *"My life principle is life to eat." (Nindy)*

3.3. Gastronomy on Media

Gastronomy in the media is always become interesting research focus in social study. Recently, gastronomy in the media has been studied by scientists from various fields of science. Much of the research on social media and food has been focused on the behavioral aspects of social media user (the one who uploads photos/communicators). While the researches that focus on changes that happened to communicants brain system when they see food photos.

Food photos and social media are two inseparable things, especially for digital era. Research that focus on food and media continues to grow. A research related to photos of food and social is done by Holmberg (2015), who saw photos uploaded Norwegian teenagers in their Instagram accounts. His research result said that 85% of Norwegian teenagers have uploaded food photos in their Instagram account, and most of them are high calorie foods.

The other research focus on food photos in social media from communicator side ever done by Fried (2014). The study analyzed the language of food from 3 million photos on social media Twitter. The results of this text study show a characteristic pattern of the communicators. The research that conducted in the United States shows patterns of data on rates of diabetes, obesity, location of residence and even their political preferences.

This study comes to see the changes of informants who view food photos on Instagram. If in some previous researches focused on the psychological side and used experimental methods. This research would like to see the other side of gastronomic/culinary lovers either from the way they see the photos of food to their pattern of consumption. The informant's explanation shows that there are various changes occur in themselves in neural (response) side, physiological side and behavioral side. This research becomes important because informants can tell in detail about their habit of seeing photos of food on Instagram. Informants in this study also mentioned how the habit of their consumption after viewing photos of food on Instagram.

4. Conclusion

Visual hunger on three informants who are culinary fans expressed their interest in photos of food on Instagram and the way they enjoy photos of food on social media. They saw photos of food on Instagram in their spare time. The three informants explained that they are interested in high-calorie food photos, such as cheese, sausages, and cakes, rather than low-calorie food photos such as vegetables or fruits. Instagram changed the consumption patterns of the informants. They use photos of food on Instagram as a reference for places to eat. They consume the foods they like, most of which are high calorie foods.

Reference

Hartman Group. (2012). Clicks and cravings: the impact of social technology on food culture. *Hartman Consulting*.

Holmberg, Christopher. Chaplin, John E. Hillman, Thomas. & Berg, Christina. (2016). Adolescents' presentation of food in social media: an explorative study. *Appetite 99 121e129* (pp. 121-129).

Hu, Y., Manikonda, L., & Kambhampati, S. (2014). What we instagram: A first analysis of instagram photo content and user types*. In *Proceedings of the 8th International Conference on Weblogs and Social Media, ICWSM 2014* (pp. 595-598).

Irwansyah. (2016).Traditional icon culinary as Indonesia gastro brand. *Advanced Science Letters Vol. 22*, 12, December 2016, (pp. 4255-4258).

Spence, Charles. Okajima, Katsunori. Cheok, Adrian David. Petit, Olivia. & Michel, Charles. (2015). Eating with our eyes: from visual hunger to digital satiation. *Brain and Cognition 110* (pp 53-63).

Vásquez, Camilla. & Chik, Alice. (2015) "I am not a foodie…": culinary capital in online reviews of Michelin Restaurants, *Food and Foodways, 23:4*, (pp 231-250)

https://www.go-jek.com/about/. *Satu Aplikasi Untuk Semua Kebutuhan Anda*.