



Food Print, Sustainable Tourism, and Japanese Pop Food Culture in *Manga* Series

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Abstract. In the world of tourism, sustainable environment quality is one issue arising within the climate change and global warming era happening throughout the world. Eating culture is one related aspect in which each choice in food material preparation, processing, and consumption will leave carbon footprints or gas emissions. This study raises the issue of environmental sustainability in Japanese food culture in *manga* and how *manga* can be an alternative for environmental education in term of side effect of tourism alongside communication and popular culture approaches. The subject of this research was the *Oishinbo* manga series, a Japanese typical graphic novel upholding the Japanese eating culture as its main topic. This descriptive-qualitative approach used the visual semiotic method previously developed by Roland Barthes, that is investigating sign and how sign work in several stages of analysis namely denotation, connotation, and myth. The results showed that the food processing starting from the upstream to downstream denotatively (first stage) sided to the environmental quality assertively shown through verbal texts and non-verbal visualization packaged in comedy by its central characters. Meanwhile, the dictions connotatively (second stages) showed respect for environmental issues by continuously realizing the delicacy of food taste quality. The carbon footprint manifests itself as greenhouse gas emissions as a result of food processing activities that affect the environment, beginning with the agricultural production process and continuing until the food is ready to eat. Thus, the constructed myths (third stages) including consciousness, awareness, and responsibility for good food quality were addressed to the Japanese concept that highly appreciate nature, which became one of the basic element of *washoku* (Japanese traditional food culture) that described in the meaning of this three word, *itadakumasu*, *gochisousama-deshita*, and *mottainai*.

Keywords: Food Print · Sustainable Tourism · Food Culture · *Manga* · Semiotics

1 Introduction

In various countries, tourism remains an excellent business. Although the global crisis occurred several times, the number of international tourist trips still showed positive

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growth. From 25 million (1950), 278 million (1980), 528 million (1995), and 1.14 billion (2014), to reach 1.18 billion (2015). In addition, the domino effect of tourism also feels powerful and very significant in the economy, especially when it is associated with food industry (culinary tourism) and agricultural industry (agritourism). Meanwhile, food consumption has been considered an important part of the tourism experience [1–4]. Local specialties can be important both as a tourist attraction itself and in helping to shape the image of a destination [5].

Food in tourism becoming a very big business, but it also contributes to very serious environmental problems. One issue arising from the contemporary eating culture caused by tourism is the food-print or food carbon foot-print. This carbon footprint is manifested as greenhouse gas emissions as the consequence of food processing activities which affect the environment, starting from the agricultural production processes, and distributions, until the food is ready for consumption. This issue has become an inseparable part and ecological indicator in realizing integrated and sustainable environmental quality, including the effect of food production and supply processes and even the catastrophic potential sign in the future when neglected [6–11].

The food-print phenomenon and its relationship with global warming have actually become the homework of the world's residents in which sufficient information is considered as one strategic effort for its realization. One of media possibly used as a comfortable learning instrument, stimulating creativity, and building the literary culture is comics or graphic novels, including scientific and environmental issues. Comics have specifically become necessary as the educational instruments to enable the reading individuals to be actively involved in discussing the environmental issues [12–15]. One of typical comic platforms is *Manga*, coming from Japan, recognized as a world popular culture product, and has even become a hegemonic power [16]. Its uniqueness in amplifying through the iconic and representative characters and messages has enabled the readers to effectively enter their subconsciousness, so that the message can be comfortably accepted [17]. *Manga* is, in fact, the right media to convey the certain and more acceptable moral messages through the systematically arranged pictures, so that the storylines are easy to understand [18].

One *manga* raising the issue is *Oishinbo* series, a Japanese comic written by Tetsu Kariya and Akira Hanasaki and mainly discussing food. *Oishinbo* is not only written in Japanese language and letters, but in 2019 also written in English as one international language and thematically made in seven editions. *Oishinbo* is also known as a popular *manga* in Japan and able to establish itself as a leader in food or culinary themes [19, 20]. This research aimed to raise the theme siding to a sustainable environment in Japanese food culture in the *manga* of *Oishinbo* and how *manga* can become an alternative agent of change in the environmental education in adjacent with the communication and popular culture approaches.

2 Research Method

The research subject was the *Manga* of *Oishinbo* series Volume 3 entitled “*Ramen & Gyoza*”, Episode 3 entitled “*Soup and Noodles*” and Episode 4 entitled “*Battles! Village Revival*”. Through a two-stage significance mechanism, this research first tried

to identify the denotative aspects or the relationship between signifier and signified as presented in the *manga*. Furthermore, the next stage was the connotative aspects as the representation of link between signs which have the subjective dynamics and multiple interpretations from the readers. In this research, the authors used a semiotic analysis previously developed by Roland Barthes with two orders of significations to obtain an optimum understanding. The first stage was a relationship between signifier and signified in a sign to an external reality called denotation. Meanwhile, the second stage, connotation, describes the occurring interactions when the signs meet the readers' feelings and emotions as well as the cultural or ideological values.

Barthes's ideas states that connotation is closely related to ideological operations. Barthes expressed it in terms of myth. This connotation label explains the mythical practice. Myth are images of a particular culture that explain or understand some aspects of reality or nature. Barthes considers myth as a culture in which there is a way of thinking or understanding something [21]. Barthes sees myths and ideologies working together to interpret certain things from unique individuals by naturalizing them historically [22]. The existence of a sign will be maintained if the user uses the sign when communicating and maintains the mythical values connoted by their culture. The relationship between signs and myths and connotations is ideological in nature. Therefore, when a sign creates myths and values in a concrete form and is widely known, then the user of the sign has given life to ideology.

3 Results and Discussion

3.1 Description of *Oishinbo*

Oishinbo is a *manga* series mainly discussing Japanese food. The framework of this story was dealing with a competition between two culinary experts who have, in fact, blood ties—child and parent—yet both had psychological conflicts, so that they nullified the existence of each other. They also had conflicts with a journalist named Shiro Yamaoka and a culinary expert named Yuzan Kaibara. Both were project managers in the Japanese food menu, known as Ultimate Menu vs. Supreme Menu. In addition to introducing various types of Japanese food, the *manga* series, having a total of 111 episodes during the publishing period of 1983–2014, raised the stories about Japanese food in a comprehensive theme, starting from the processes of preparing food ingredients, processing, serving, up to eating the food, including providing the context of its natural, social, economic, cultural, and political resources. These showed that food in Japanese culture is not only in a consumption dimension, but also an inseparable part of national identity with a global economic value [23, 24].

Oishinbo in the international version was packaged in seven story chapters: 1) Japanese dishes; 2) Sake; 3) *Ramen* and *Gyoza*; 4) Fish, *Sushi* and *Sashimi*; 5) Vegetables; 6) Rice Delicacy; and 7) *Izakaya* Pub. However, this research Particularly discussed the *Oishinbo* Volume 3 entitled *Ramen* and *Gyoza*, consisting of five episodes: a) Soul of *Ramen*; b) French food and ramen rice; c) Soup and Noodles; d) Battles! Village Revival; e) A New *Gyoza*; and f) Chinese Food and China. The first episode raised the story about how to make ramen noodle dough and process the dough into delicious food. The second episode explored the inferiority and anxiety of a local food lover. The

third episode showed criticism on the glorification of popular food, yet actually not in good quality. The fourth episode discussed the revitalization of local culinary potentials through the wisely processing the food sources. The fifth episode raised the culinary creativity and authenticity. The sixth episode discussed the socio-political and historical aspects attached to a culinary. Although using English, *Oishinbo* in volume 3—as well as the other volumes—still followed the Japanese book concepts, starting from the right page instead of left page and on each page, both texts and images started from the top right and ended on the bottom left.

Food is one of the most common themes in manga, anime, and comics. There is a genre called gourmet manga in Japan. Gourmet manga is a manga that introduces cooking recipes and techniques starring famous chefs and professionals. It also introduces cuisines from around the world. This kind of manga, exploring and showcasing Japan's unique food culture, and at the same time sharing more than just culinary facts, but also Japanese values, art, and identity.

3.2 Denotative Analysis

In episode 3, one of two episodes studied in this research, Yamaoka Shiro with his colleagues, Kurita Yuko and Hoshimura Rumiko, visited a restaurant known as *Ginmente Ramen*, a favorite culinary destination in Ginza area, an area on the east side of Tokyo and famous for its shopping and culinary centers. One reason visiting the restaurant was to write an article about *Hiyashi Chuka*, one type of cold ramen noodle dish served with various toppings. Yamaoka expressed his disapproval that the food at the restaurant was the best. He revealed that the cucumber used as a topping on the noodles had a strong pesticide taste. Besides, Yamaoka also said that the flour was low in quality since using too much *kansui* or food additives, ash water or soda. This made him almost fought with the shop owner. However, Yamaoka is greatly assertive that the products free from pesticides and made from organic materials are far higher in quality. He then started with Kurita Yuko making a number of visits to find the previously mentioned food ingredients. Yamaoka visited his old friend, Kawanishi, a director of a noodle company, and told him that beside using the imported wheat, there is one best wheat quality, that is, the organic local wheat. He then visited homes of the relatives from Yamaoka to find chickens used to make the soup broth of ramen noodles. The chickens were raised in a healthy environment with healthy feed and slaughtered when the age met the requirements of about 2–3 years instead of 2 months to make the broth. After processed, the results then received a recognition from the other famous culinary experts due to the delicious and healthy noodles, much fresher broth, more delicious vegetables and no pesticides or even herbicides, including the eggs which were without any fishy taste since obtained from a health environment and healthy feed.

Meanwhile in Episode 4, the story began where Yamaoka camped in a competitive situation between Kohigashi Village and Konishi Village as the tourism destinations. Kaibara acted as a consultant for Konishi Village raised local culinary theme by optimizing its rural resources, such as fish or pork. Yamaoka also acted as a consultant for Kohigashi Village and raised return to nature theme, serving the commonly found food, yet processing with organic approach, such as chicken, beef, and pork. In fact,

Yamaoka suggested to synergize the villages since Konishi village had natural beauty, while Kohigashi village could be a supplier of healthy and delicious food ingredients.

[Denotative meaning found in Episode 3, in Yamaoka's verbal and non-verbal taste description when sampling Hiyoshi Choka's made dishes that do not match with many people perceive. Mr. Yamaoka thinks that the bad flavors of dishes are caused by the use of ingredients that not considered to be of good quality. In episode 4, denotative meaning found the situation when Yamaoka was in contestation between serving delicious food or became a part of a tourism destination that can cause environmental damage.]

3.3 Connotative Analysis

In Episode 3, the verbally and non-verbally spoken texts were visualized in pictures, showing that Yamaoka was not in the side of culinary using pesticides, excessive food additives, and resulting the process not in favor of a sustainable ecosystem. His assertiveness in expressing the 'real' taste of those considered as delicious and popular food, almost caused fights. His assertive attitude who always tried to prove that organic products were healthy, delicious and beyond the food taste served in the restaurant, actually illustrated his position which was in side with the quality of organic products as the main reference for ingredients to produce high-quality culinary. This was emphasized in a simple narrative without patronizing, yet substantively informative that food ingredients, from a good environment and wisely managed, will produce excellent quality.

Similarly, in Episode 4, the messages were visually conveyed, such as when animals were raised in a healthy environment and given with natural feed, good quality products will be resulted, and when processed, the dish will have a delicious taste beyond the manufacturer's products, and certainly not causing a bad impact on health. One thing that Yamaoka wanted to convey in the organic-based management was that organic materials had the economic potentials and more prosperous to various stakeholders. The visually displayed expressions of the villagers in response to this idea was that they believed in the perceived benefits, both materially and immaterially.

Connotative meaning that found in Episode 3 is when Yamaoka's claim to the quality of food served that does not meet delicacy standards was substantiated by searching for high quality ingredients (from organic product/natural farming). After processing organic product, the taste is very different from dishes that do not use organic products. In Episode 4, connotative meaning found when Yamaoka suggested that in order to gain benefit to those involved in gastronomic tourism, it is important not only provide delicious food, but also to secure food source from a well-managed and sustainable environment.

3.4 Myth

The reading results of the existing denotative and connotative analysis in Episode 3 of *Oishinbo manga* Volume 3 showed that the Japanese eating culture greatly emphasized on quality, starting from the quality of ingredients to process to the tastes produced. The ingredient quality aspects in Japanese eating culture were something uncompromised and became a necessity to obtain the best standards and assertive on things not in accordance with the previously set standards. In addition, reading the *Oishinbo manga* also led to the fact that the best quality standard of food ingredients was in the degree of authenticity, or

sourced from the agricultural and/or breeding activities managed with the lowest level of non-natural intervention or even without any intervention. The interesting part and also raised in Episode 4 of Volume 3 was that Japanese eating culture was not only oriented on the quality and taste coming from the natural ingredients, but also the desire to bring happiness and prosperity through the natural conditions supporting the availability of natural food sources. The interpretation of *Oishinbo manga* in this episode was that a mutual commitment was greatly required to create an eating culture siding to the natural conservation.

Authenticity and quality of the ingredient that bring out the sense of happiness and prosperity rooted in Japanese mindset. The Japanese believe that food comes from the power of nature, not the power of humans. It means that the work of farmers and fisherman is highly valued, but that's not all. Rather, the role of nature is seen as dominant, with human hands assisting and supporting the harvest. People feel a certain reverence for food that is supported by the blessing of nature. *Itadakimasu* is the word that expresses gratitude to the person who prepared the food, but at its root is an appreciation for the universal and ever-present spirit that is believed to reside in the food itself.

Whether from plants or animals, from which we derive life-giving nourishment, and such appreciation inspires awe in nature. The Japanese was thought not to leave any single food, even one grain of rice behind. The commandment not to waste food is expressed in the in the word "*mottainai*", which literally means "What a waste!" that describe how unfortunate it is for something to go to waste. It expresses a sense of guilt, regret, or sorrow that caused by act of wasting. This value is closely in line with current ecological concept that call for conservation of the natural environment.

The research findings (Table 1) show that *manga* or comics as a product of popular culture are actually their own strengths as a means of branding ideas and opinions, including bringing awareness to the importance of environment. A product does not merely exist, but also has the function as a driving force and life dynamics ensuring how a civilization represents itself, including optimizing itself as an effective communication medium in the marketing ideas and opinions [25–28]. This research shows that environmental issues are not always raised from a heavy narration, something burdening/imaginatively dogmatic responsibility, yet articulated as a choice, packaged in light activities, something found daily, such as in food content and comic media.

The quality products are those sourced from natural processes. An environmental issue can be packaged into something internalized as needs, desire, and lifestyles, so that skills are greatly required to identify a person's attitude in making the decision that the conveyed message is not coercive, yet affective and stimulative presenting metacognitive. This also shows that comics can actually be optimized as the environmental learning agents and edutainment in nature, not only entertaining, but also providing insight without imposing the instructional messages on *manga*. *Manga* can be used as a means of environmental learning, stimulative hub to invite readers to obtain information/references. *Manga* can be used as a means of criticizing the consumption behavior not siding to the environmental quality, because not only the taste is less competitive, yet actually burdening the earth with pollutants and risking the quality [29–34].

Table 1. Denotative & Connotative Analysis and Myth

Episode	Denotative	Connotative	Myth
Soup & Noodles	The verbal and non-verbal expressions of Yamaoka when trying the dishes made by <i>Hiyoshi Chouka</i> expressing the flavors not in accordance with what many people perceived, due to the use of ingredients considered not in good quality.	The assertiveness of Yamaoka towards the quality of food served which was not in accordance with the delicacy standard proven through the searching of high-quality ingredients (organic products/from the natural agricultural-breeding environments. After processing the organic products, the taste became greatly different from the dishes without the organic products.	The quality of ingredients in Japanese eating culture is something uncompromised. The best quality of Japanese food was that coming from natural organic products.
Battle! Village Revival	Yamaoka was in a contestation situation to serve the delicious food and was able to become a part of a tourism destination.	Yamaoka suggested that it was essential to not only serve delicious dishes, but also ensure the food sources coming from a well-managed and sustainable environment to provide benefits for the parties involved in the culinary-based tourism destination.	Synergy and collaboration in optimizing the organic products would provide more benefits both materially and immaterially.

4 Conclusion

The contemporary eating culture that influenced by tourism, leading to the sustainable environment is a message which should always be echoed in an entertaining educative, and non-patronizing platform. Through semiotic analysis previously developed by Roland Barthes, *Oishinbo* as a typical Japanese *manga* or comic has shown its role as one of communication media prioritizing the benefits possibly received by the culinary lovers when utilizing food ingredients sourced from the environmentally friendly processing instead of punishing. The carbon footprint manifests itself as greenhouse gas emissions as a result of food processing activities that affect the environment, beginning with the agricultural production process and continuing until the food is ready to eat.

The conveyed messages—both in texts and images—are designed by paying a close attention to the context attached in the story showing the highest respect to the quality of organic food ingredients and/or those produced in a natural environment that based on the concept of *itadakumasu*, *gochisousama*, and *mottainai*. Although the main theme of this comic is related to culinary tastes, the perceived benefits are not only felt with the physiological, but also psychological aspects, in the form of happiness and prosperous feelings.

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