

# An Informatics Discussion on PR Strategy in Emo-Map Making for Purpose of Transmitting Information on Natural Environment Conservation Measures

Through Regional Contribution Activities  
in Tashiro District, Shimada City, Shizuoka Prefecture

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自然環境保全対策の情報発信を目的とした  
エモマップ制作のPR戦略に関する情報学的考察  
～静岡県島田市田代地区における地域貢献活動を通して～

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## Abstract

The purpose of this study is to discuss a PR strategy in Emo-Map made in order to transmit to citizens information on the conservation activities for precious animals and plants and natural environments found in building an express highway in Tashiro District, Shimada City, Shizuoka Prefecture from an informatics perspective. “*Emo-i*” in Emo-Map is a youth slang derived from “emotional”, which is said to mean “the state of getting emotional” and “a strongly appealing emotional chemistry in getting excited”. Then, an attempt was made to visualize natural environment conservation activities in the said district by making a map with the keyword of “*emo-i*”. This Emo-Map was made through collaboration among three parties: city officials, citizens of Shimada City and illustrators/designers as local businesses, and university students. The details of such activities were transmitted via the university official website and individual SNSs as well as the city’s Facebook. In addition, a courtesy visit was made to the mayor of Shimada City and a newspaper carried an article describing how the report on the completion of the map had been made to the mayor then. These suggest that the making of Emo-Map has achieved a certain level of effects as a PR strategy regarding natural environment conservation measures. Meanwhile, how to verbalize the sensory subjective expression of “*emo-i*” which has an implicit property, and then express them as illustrations on the design have become a challenge.

**Keywords:** PR Strategy, Natural Environment Conservation, Transmitting Information, Youth Slang, Emo-Map

## 要 旨

本研究は、情報学の観点から静岡県島田市田代地区で高速道路建設の際に発見された貴重な動植物や自然環境の保全活動の情報を、市民に発信するために制作したエモマップのPR戦略について考察することを目的とする。エモマップの「エモい」とは、emotional（エモーショナル）に由来した若者言葉で、「感情が動かされた状態」や「感情が高まって強く訴えかける心の動き」という意味を持つとされる。本研究では「エモい」をキーワードとしたマップを制作することにより、同地区の自然環境保全活動を可視化することを試みた。このエモマップは、市職員と島田市民および地元業者のイラストレータ・デザイナー、そして大学生の三者が連携し制作された。本活動の様子は、市のFacebookをはじめ、大学公式ホームページや個人のSNSにより情報発信された。また、島田市長への表敬訪問も実施され、マップ完成の報告の様子が新聞記事に掲載された。以上のことから、自然環境保全対策に関するPR戦略として、エモマップ制作が一定程度の効果があったことが示唆された。一方で、「エモい」という暗黙知的の性質を持つ感覚的な主観表現をいかに言語化し、イラストとしていかにデザイン化するかが課題となった。

**キーワード:** PR戦略, 自然環境保全活動, 情報発信, 若者言葉, エモマップ

## 1. Introduction

### 1.1. Background of Study

When humans engage in a development for their living, it becomes important to balance the development and nature. For example, because unexpectedly important animals and plants are sometimes found in the development of an express highway, activities to protect them become important (YAMASAKI 2008; OISO, et al. 2020).

Tashiro District, Shimada City, Shizuoka Prefecture that this study focuses on is located in the northern part of former Ita Village and use to be a basin-shaped land in the course of Chobutsu Sandou (Approach) leading to Chiman Temple. Later, during the period from 2000 to 2005, this district was used as the land for disposing of dirt generated in association with the building and development of Second Shin-Tomei Expressway. Then, an environmental assessment implemented in the reclamation project for developing the expressway found more than one precious animal and plant during the development, revealing that large Raptores like *Spizaetus nipalensis* (*kumataka*) and *Accipiter gentilis* (*ohtaka*) were inhabiting the land. In addition, mitten crabs (*mokuzugani*) were found in the water area of this region characterized by its basin-like shape and related humid environment, indicating its continuity with sea. These findings accelerated a movement toward natural environment conservation in Tashiro District, leading to natural environment conservation measures participated by experts from early stages for conserving natural environments.

### 1.2. Natural Environment Conservation Measures in Tashiro District

Based on survey results with respect to the environment conservation, setting the basic policy for ecosystem conservation in Tashiro District as “to conserve the unique characteristics of the land form as far as possible”, the conservation and restoration of fundamental environments (land form, forests and water system) that established the environments of diversified village forests was laid out as the goal. Generally, the following three measures are listed for ecosystem conservation.

(I) Conservation by lessening the impact of

development through downsizing the development itself in order to conserve areas that should be protected in particular

- (II) Installation of special facilities for reducing impacts on wildlife generated from development
- (III) Maintenance of an environment where living things can make their habitat by creating a similar one if there is a natural environment to be lost due to development

The order of these measures was organized so that the first priority of the natural environment conservation in the said district was given to (I) followed by (II) and (III). As a specific example for Measure (I), in order to conserve rich nature in Tashiro District, several fens and their peripherals above the headstream of Ita River were not reclaimed and remained as they had been. Consequently, in these fens, the original vegetation of forest edges in Tashiro District is still observable. Meanwhile, regarding Measure (II), building a big road in forests will split up the groups of individual animals and may cause traffic accidents that kill animals. For reducing such an impact, green belts were put on the road and corridors specially designed for animals were installed. Through this measure, it was confirmed that a variety of animals including Japanese serows (*nihon-kamoshika*) being a special natural monument, foxes, badgers, wild boars and wild rabbits used these green belts. Further, for Measure (III), a pond where forest green treefrogs living under a humid environment were supposed to deposit their eggs was dug in the vicinity of a garbage incineration for making it an alternative spawning area. As the result, 20+ egg batches were observed there every year, this pond becoming an important area in which forest green treefrogs can live in Tashiro District.

### 1.3. Purpose of This Study

Long years of continuing surveys and natural environment conservation measures in Tashiro District, Shimada City were highly evaluated by the examination committee for protection measures and succeeded in conserving the ecosystem and the diversity of organisms in Tashiro District. On the other hand, however, information on these

preservation measure activities were not transmitted well and accordingly there still remain a challenge of how to have experts and general citizens widely recognize the said district as a village forest rich in nature.

With this background, this study from an informatics perspective aims to discuss a PR strategy of Emo-Map made for the purpose of transmitting to general citizens the information on natural environments and precious animals and plants found in the development of the expressway in Tashiro District, Shimada City, Shizuoka Prefecture.

#### 1.4. Previous Studies and Positioning of This Study

Past study records are as follows. In order to newly discover various local appeals in the prefecture, the author has been working on the making of a map with novelty and topicality as a regional contribution for Shizuoka Prefecture. For instance, in Iinoya area situated in a small basin in the northeastern part of Hamana Lake in Hamamatsu City, Shizuoka Prefecture, there still remain ancient ruins such as mounds and shrine rooms and an NHK drama took place on this area. Then, while exploring the streets of Iinoya along with study collaborators, they expressed all events which occurred in this area from ancient times to date as a map of the whole history (KITA & YAMADA 2019). Additionally, in Yaizu City, Shizuoka Prefecture, they visualized what they felt and understood while actually walking down the streets with onomatopoeic words, making the map

(KITA, et al. 2017).

It will be a new initiative in this study to transmit information on the natural environment conservation conducted in the said area by, based on the study background described above, visualizing the natural environment conservation activities in Tashiro District, Shimada City and making the map.

## 2. Method

### 2.1. PR Strategy in Natural Environment Conservation Measures

There are three major concepts of the PR strategy regarding natural environmental conservation measures in Tashiro District: (1) the designing of a map with “emo-i” expressions, (2) collaboration with the citizens of Shimada City and local businesses and (3) proactive information transmission via information media including SNSs and websites.

First, as PR strategy (1), a map was desired to be expressed with the keyword of “emo-i” in this study. “Emo-i” in Emo-Map is the word derived from “emotional”, which means “the state of getting emotional” and “strongly appealing emotional chemistry with getting excited” and is a youth slang (YONEKAWA 1998) mainly used by youths and university students (Mynavi 2018). To express this “emo-i”, attention was paid to a film camera with a lens sold under the name of “Utsurundesu” by Fujifilm Corporation. Today, everyone can conveniently capture an image partly smartphones

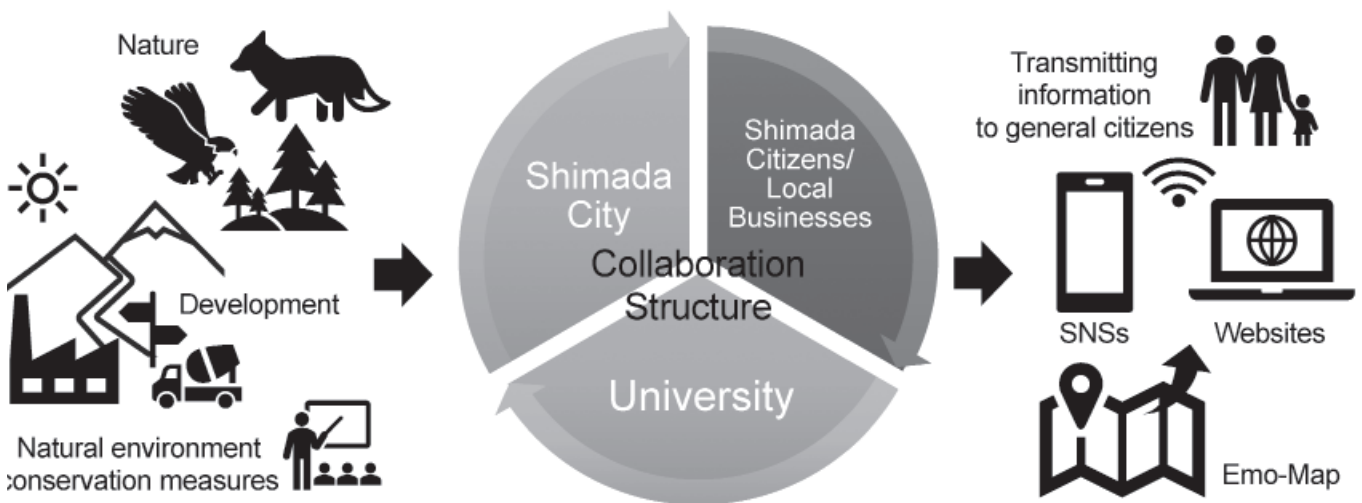


Figure 1 A PR Strategy in Emo-Map Making for Purpose of Transmitting Information on Natural Environment Conservation Measures in Tashiro District, Shimada City

with the camera function, but “Utsurundesu” has a limited number of photos to be taken and further does not allow photographers to retake a photo even if they have made a bad shot. Meanwhile, it enables photographers to capture a retro-flavored, *emo-i* image, gaining popularity chiefly among university students and youths using Instagram and Facebook.

#### “Utsurundesu”<sup>1</sup>

Because the number of photos to be taken is limited, because retaking a phot is not allowed even if making a bad shot, the sense of respecting a single shutter very much, frustration with not being able to see photos until finishing taking the certain number of photos, and analog finish only using films as if reflecting our heart of the time are all new again exactly because we are living in the time when we can see photos as soon as taking them. (Reference source: the official website of Fujifilm Corporation)

Many years of natural environment conservation measures have the stories of relevant parties’ unordinary hardships and efforts and it was decided that *emo-i* images which could emotionally tell such stories would be taken with “Utsurundesu”. The making of Emo-Map using images taken with this “Utsurundesu” aimed for novelty and topicality. Secondly, PR strategy (2) is collaboration with the citizens of Shimada City and local designers and illustrators. In this map making process, the effects of PR activities on the citizens were pursued by having the citizens and local businesses participate in it from the research stage and by requesting local businesses in the city to engage in the whole process including the invention of illustrations, the designing of the map and further the printing process. Thirdly, as PR strategy (3), information transmission was sought by proactively utilizing a wide range of media such as Facebook delivered by Shimada City, the university’s website, SNSs used by the study participants and press releases sent to respective news agencies.

## 2.2. Outline of Survey

### 2.2.1 Prior Meeting

On November 16, 2020, a prior meeting was held to do public relations for natural environment conservation activities in Tashiro District. A city official provided detailed explanations on local environment conservation (refer to Picture 2). Then, a discussion was conducted with responsible city officials regarding the future schedule, map making, etc.



Picture 2 Scene of City Official’s Explanation on Environment Conservation

### 2.2.2. Prior Survey and Interview Survey

In a prior survey implemented on December 25, 2020, two university students and the author discussed test shots using “Utsurundesu”, the selection of the survey site, how to take shots, etc. (refer to Picture 3).



Picture 3 Scene of Prior Survey

On the same day, an interview survey was carried out (for about 40 minutes) with Mr. S residing in the city for the purpose of researching the historical backgrounds of Tashiro District, Shimada City and its situations when being developed then. The audio in this interview was recorded with a voice recorder

<sup>1</sup> <https://www.fujifilm.com/jp/ja/consumer/films/utsurundesu-simpleace>



named SONY ICD-PX440. The information collected from the interview with Mr. S included the facts that the surroundings of this district used to be a settlement of surviving samurai soldiers (*ochi-musha*) and they were unable to play kite-flying or fireworks since they wanted to keep their location secret, that there had been a place called outside the temple (*teragai*) represented by cemeteries, and that people in the district had a strong solidarity and therefore a system called “*yui* (unity)” was naturally created through their collaborative work (refer to Picture 4).



Picture 4 Scene of Interview Survey with Mr. S

### 2.2.3. Main Survey

On January 6, 2021, 10 members in total consisting of 5 university students, 4 illustrators and designers residing in Shimada City, and 1 author carried out the main survey. On that day, Tashiro District was divided into the west area and the east area in each of which a survey was carried out (refer to Picture 5). Additionally, on the same day, the tour of a general waste incineration facility in Tashiro Environmental Plaza was made (refer to Picture 6).



Picture 5 Scene of Shooting / Main Survey  
Using “Utsurundesu”



Picture 6 Scene of Tour of General Waste Incineration Facility in Tashiro Environmental Plaza

## 3. Result

### 3.1. Making of Emo-Map

Emo-Map was made using the images taken in this survey (refer to Picture 7). In this process, verbalizing the intuitive and subjective phenomenon of “*emo-i*” and expressing them with illustrations became a major challenge. Then, while closely cooperating among respective responsible persons mainly on Zoom, Emo-Map was made with selecting contexts and illustrations to be placed on it (refer to Picture 8). Emo-Map was completed in late March and distributed in the facilities in Shimada City and in the university.



Picture 7 Images Taken with “Utsurundesu”



## 田代地区開発における生態系の保全

**田代地区のむかし**  
田代地区は、かつては智清寺へ続く丁仏参道の途中にある盆地状の土地でした。



**埋め立て事業**  
新東名高速道路のトンネル工事で発生した残土の埋め立て地として利用され、今の地形になりました。



**自然環境保全意識の高まり**  
埋め立て事業の一環として実施された調査により、複数の貴重な動植物が見つかりました。特に、クマタカやオオタカのような大型の猛禽類が生息していることが分かったことで、田代地区の自然環境保全の意識が高まりました。

**環境保全への配慮と生態系を守る工夫と対応**  
島田市では、静岡県や各団体・専門家と連携しながら、田代地区の自然環境を守るための工夫を考えてきました。田代地区は、盆地地形とそれに伴う溜湖環境が特徴であり、水域にはモズガニが生息していることも分かりました。そこで、田代地区の生態系をできる限り保全していくことになりました。

**『多様な里山環境の復元』生態系保全のための対応と事例**

**保全 開発自任の規模の縮小**  
沢地保全：伊太谷川源流よりも上流の沢地とその周縁のいくつかは完全に残し、生息していた希少植物を、沢地へ移植しました。  
残存緑地：現在ソーラーパークに囲まれた丘は、周辺への種子拡散の拠点とするために、残存緑地として残しました。現在では、常緑広葉樹林（コジイ、アラカシなど）を見ることが出来ます。

**低減 野生動物専用設備の設置**  
多自然型水路：生物が棲める工夫を水路に施しました。  
排水路工の工夫：一部の水路には盛り板を用意し、小動物の落下による死亡防止を試みました。  
グリーンベルト：道路の上に動物専用のグリーンベルトを整備することで、動物の個体群の分断や動物の交通事故の低減に努めました。特別天然記念物のニホンカモシカをはじめ、キツネやアナグマ、イノシシ、ノウサネなど多様な動物たちがグリーンベルトを利用していることが確認されています。

**代替 開発によって失われる自然環境と同様の環境づくり**  
代替産卵池：環境プラザの近くにつくった代替産卵池は、毎年20個以上のモリアオガエルの卵塊や、さまざまな両生類や爬虫類、トンボ類が観察できます。野生動物たちにとっても、重要な止水環境として利用されています。  
ワンド水路再生：水路にわざとカーブをつけたり側面に蛇籠を設置することで流れに変化を与え、天然のワンドに近い岸辺を作り直しました。岸辺周辺では、ゲンジボタルやヘイケボタルが毎年確認されています。

～自然と開発の調和～

### 島田市田代地区 自然環境保全対策 エモマップ



●研究事業名：田代地区の自然環境保全対策の促進 ●しずおか中部連携推進圏圏域環境対策事業 中田2年度連携事業 ●学業大が設置する情報学センター

## 多様な里山環境の復元をめざして

島田市と常葉大学経営学部の情報学ゼミナールは、田代地区の開発に伴う自然環境の保護に尽力した多くの試みを、「エモい」をキーワードに情報発信したいと考え「田代地区エモマップ」の作成に取り組みました。「エモい」とは、エモーション由来の言葉で、「感情が動かされた状態」「感情が高まって強く訴えかける心の動き」という意味があります。

**田代の郷**  
田代地区は、人の存在を明らかにしないために風を揚げない音なしからも、戦国時代の落武者部族として考えられています。徳川時代中期には経済的に豊かになり、元禄年代に現在地に菅宮八幡神社を建立したとされています。温帯な気候に恵まれたことで農業も盛んとなり、政治面においても指導的な地区であったとされます。

**田代環境プラザ**  
島田市の田代環境プラザでは、資源循環型の社会を目指すため、環境に優しいごみ分別処理や、堆肥化などを行うリサイクルを行い、島田市民の暮らしを支えています。

**田代の郷温泉「伊太里の湯」**  
梅の里伊太の豊かな自然に囲まれた日帰り天然温泉。自然に囲まれた伊太和泉の湯の湯かきを感じながら心身を癒してください。

**鳥田ゆめみらいパーク**  
令和2年6月に開園した多目的スポーツ・レクリエーション施設です。トイレ、休憩室、授乳室が完備されています。

**グリーンベルト**  
森の中に大きな道路を作ると、動物が分断されたり交通事故によって動物の命が危なげたりします。そこで、道路の上にグリーンベルトを整備し、動物専用のコリド（回廊）を作りました。



Picture 8 Completed Emo-Map



### 3.2. Information Transmission via SNS and Website

The activities of this study were posted on the official Facebook of Shimada City Public Relations (dated January 6) and their news was updated on the official websites of the university to which the author belonged. In addition, participants in this survey were encouraged to post such activities on their individual Facebook, Instagram, etc.



Picture 9 Facebook of Shimada City Public Relations & Official Website of University

### 3.3. Courtesy Visit to Mayor of Shimada City

On March 30, 2021, a courtesy visit was paid to Ms. SOMEYA Kinuyo, mayor of Shimada City, at the city office of Shimada City (refer to Picture 10). On that

day, the mayor was explained about the outline of this study and Emo-Map was delivered. Further, the scenes in this visit were presented on a newspaper (refer to Appendix A).



Picture 10 Scene in Courtesy Visit to Mayor of Shimada City

## 4. Discussion

In this study, an unprecedented new map named Emo-Map was made in order to transmit to the citizens information on the natural environment conservation activities for precious animals and plants that had been found in building the express highway in Tashiro District, Shimada City. The details of such activities were widely transmitted via Facebook of Shimada City and the university official website. In addition, it is considered that involvement of the citizens of Shimada City and local businesses in the making of the map including their participation from the survey stage made the citizens to some extent become aware of the natural environment conservation measures in this district. Further, it can be concluded that the PR activities were done for the citizens also because the scenes in the courtesy visit to the mayor was presented on the newspaper.

In the meantime, in making Emo-Map, verbalizing sensory and subjective expressions such as “emo-i” and expressing them as illustrations became a challenge. Sensory phenomena have an implicit property of hardly being put into words well in many cases (YAMADA 2016) and, further, even if a participant has taken the picture of a scenery which he/she finds *emo-i*, others do not necessarily feel likewise. For examples, sensory and subjective aspects are heavily contained in the contexts of

collected verbal reports such as: “*emo-i* places in the village of Tashiro are surrounded by bamboos and trees, have a river nearby, and remind us of old scenes”; “I think the *emo-i* part of green belts after all is their placing a priority on animals. It can be considered that green belts were made based on ideas that animals would be displaced because we had developed the area and that animals might be killed due to traffic accidents, which mindset is *emo-i*”; and “The solar park is too different in size after all than solar panels seen in the city or the like, becoming a sea of solar panels. This is exactly because it respects nature and aims at a low-carbon society, providing many other advantages. (...) Thinking that the solar park was built for the sake of the citizens, Shimada City and nature makes me *emo-i*”. Designs are believed to be influenced by social phenomena including trends and business conditions of the time as well as regional characteristics and individual likings (KOTANI 2020). Thus, it took much time to make additions and alterations at the stage of adjusting the designing of the map. Spending much time for dialogues is the only option after all to resolve these challenges. In this study as well, three parties such as the city officials, the illustrators and designers as the production side and the university had a detailed meeting repeatedly, discussed the design many times, and completed Emo-Map in order to do PR activities for natural environmental conservation.

## 5. Summary and Future Challenge

This study aimed to discuss a PR strategy in Emo-Map made for the purpose of transmitting to the citizens information on the conservation activities for precious animals and plants and natural environments found in building the express highway in Tashiro District, Shimada City, Shizuoka Prefecture. Consequently, the information on the activities in this study were transmitted thorough the official Facebook of Shimada City as well as the university’s official website, the participants’ SNSs, etc. Moreover, the courtesy visit to the mayor of Shimada City was also covered by the newspaper. These suggest that the PR strategy regarding natural environment conservation measures in the said

district produced effective results to some extent. Meanwhile, how to verbalize sensory and subjective expressions such as “*emo-i*” and then express them as illustrations on the design have become a challenge.

A future challenge relates to attractive facilities in Tashiro District including a hot spring (*onsen*) facility available to the citizens and a multi-purpose sports recreation facility. Therefore, it is thought that utilizing Emo-Map in using these facilities will promote the awareness of Tashiro District as a village forest which is rich in nature and harmonizing well with environments. It is also a challenge to transmit information on natural environment conservation measures in Tashiro District, Shimada City, Shizuoka Prefecture to experts through academic conferences and meetings (refer to Appendix B).

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## Appendix A:

### Published in the Shizuoka Shimbun

A courtesy visit was paid to Ms. SOMEYA Kinuyo, mayor of Shimada City, at the city office of Shimada City, and scene in this visit were presented on the Shizuoka Shimbun. For the use of image related to the published articles, the author has applied for and obtained permission from the Shizuoka Shimbun for the use of copyrighted materials, and have obtained permission for the portrait rights of the students in the newspaper (refer to Picture A1).



Picture A1 Published in newspaper of Shizuoka Shimbun

## Appendix B:

Online video presentation was made at the report 2021 meeting on the implementation of the regional contribution activities project of Tokoha University on September 7, 2021.

