

# Evaluation of explanation panels settling at geopark' s sites –case study of the explanation panel at a memorial park of houses destroyed by debris flows in Unzen Volcanic Area UNESCO Global Geopark, Japan

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## Introduction

Explanation panels placed at Geopark sites are advertising tools to inform local residents and tourists about the value of these sites. These panels enable people to understand how important the sites. However, if the panels only have information that isn' t well known to many people, such as geology or geography, they might not be able to understand them smoothly. In order to have people with little knowledge on geology or geography know the values of those sites and have them enjoy the Geopark, it is necessary that the explanation panels are easy to read and understand. In this study, we investigated visitors' impressions on one of the panel at the Geopark' s sites. Then, considering the results, we redesigned the contents of the panel and compared the visitor' s impressions on it with the original one.

## Methods

On August 10th and September 16th in 2018, we placed video camera at a *memorial park of houses destroyed by debris flows*, which is one of the main sites of Unzen Volcanic Area UNESCO Global Geopark, to see how much time visitors look at the explanation panel. We also looked into the visitors' gender, age, hometown, and impressions on the panel. The impressions are evaluated from 1 to 6 points on five different perspectives: total impression, pictures, contents the number of letters, and font size. As for pictures and contents, 6 points is the highest score while 1 point is the lowest. As for the number of letters and font size, 3.5 points is standard and as it gets closer to 1, it means too small or too few pictures, while as it gets closer to 6, it means too big or too many pictures. Then, based on the results, we redesigned the panel and had the same investigation on October 14th and compared the results from both studies.

## Results

The number of visitors who saw the original panel was 52 out of a total of 250 visitors (about 21%). The average time they looked at the panel was 22.4 seconds. On the other hand, the number of visitors who saw the redesigned panel was 34 out of 204 visitors (about 17%). The points on impressions were as follows:

- 1) The original panel: total impression 4.7 / contents 4.6 / pictures 4.6 / the number of letters 4.1 / font size 3.7
- 2) The redesigned panel: total impression 4.6 / contents 4.8 / pictures 4.7 / the number of letters 4.0 / font size 4.0

The average time the visitors looked at the original panel was about 22 seconds and the longest one was about 63 seconds, while the average and longest times of redesigned panel were 17 seconds and 62 seconds, respectively.

**Discussion**

As for the font size, visitors had impressions such as “these are too many letters” or “it is difficult to decide where to start reading” on the original panel. Therefore, we decreased the number of letters and made the font larger on the redesigned one. As a result, the number of people who think the panel became easier to understand has increased. Though the evaluation of the contents improved, the reading time of the redesigned panel became shorter than that of the original one. This implies that visitors were able to finish reading it in a shorter amount of time. On the other hand, some visitors had negative impressions on the redesigned panel such as “there’s not enough information” or “it doesn’t tell information that it should.” This may be because we decreased the number of letters too much and couldn’t show the importance or the values of the sites enough.

**Future prospects**

Considering the results, we are going to investigate the visitors’ needs for the panel again and redesign it with necessary information to tell the values of the site. We will be able to show you the redesigned one and the visitors’ impressions on it at the conference.

Keywords: Unzen Volcanic Area UNESCO Global Geopark, Geopark, A memorial park of houses destroyed by debris flows, Explanation panels, Evaluation