Fabrications of Natural and Artificial: A Case Study of Enhancing Users’ Impressions

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Case Study: Exhibition of Folder Garden and Natural Fabrication

Two prototypical design works:
- Created to enhance users’ impressions of natural and artificial (Fig. 3).
- During the one-day exhibition of the works, free-style written impressions from 20 visitors were collected.
- Visitors’ evaluation ‘natural-artificial’ were collected.

Visitors define
Artificial or Natural

Folder Garden

Fig. 3. Concept networks from users’ impressions

Visitors define
Artificial or Natural

Natural Fabrication

Fig. 1. Identification of associations

Impressions (I) from users are collected

B. Detection of the associations (A) behind each of the explicitly expressed impressions (I)

C. Artificial-indicated impression of Natural Fabrication

D. Natural-indicated impression of Artificial Fabrication

6 cases 20 superficial words

6 cases 33 superficial words

Separate concept networks for Artificial and Natural

Table 1. In-depth impressions

<table>
<thead>
<tr>
<th>Impression of Prototypical work</th>
<th>In-depth impressions (Weights in the concept network)</th>
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<tbody>
<tr>
<td>(A) Artificial-indicated impression of Folder Garden</td>
<td>square (0.260), garden (0.256), rock (0.254), zero (0.176), pc (0.119), flow (0.110), mystery (0.107), interior (0.101), desert (0.086), works (0.073), pattern (0.063)</td>
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<tr>
<td>(B) Natural-indicated impression of Folder Garden</td>
<td>clean (0.497), cold (0.393), space (0.384), time (0.255), interesting (0.212), garden (0.191), zero (0.173), numeral (0.062), number (0.062), good (0.056)</td>
</tr>
<tr>
<td>(C) Artificial-indicated impression of Natural Fabrication</td>
<td>water (0.579), difficult (0.290), dark (0.232), boring (0.164), motion (0.153), word (0.138), flows (0.121), zero (0.107), signal (0.101), wind (0.101), snow (0.064)</td>
</tr>
<tr>
<td>(D) Natural-indicated impression of Natural Fabrication</td>
<td>natural (2.142), interesting (0.516), beautiful (0.385), sun (0.377), eyes (0.283), light (0.160), signal (0.103), heart (0.102), zero (0.100), sense (0.077)</td>
</tr>
</tbody>
</table>

Fig. 2.

In-depth impressions based on weights in concept networks

The identification of in-depth impressions is done by the construction of concept networks based on the collected explicitly created impressions:

- Associations behind each of the explicit impressions as evoked by the person that was interacting with the artefact (Fig. 1). Associations are the stimulus words that evoke the explicit impressions.
- In-depth impressions can be considered as associations initiating a higher number of connections. Thus, highly weighted associations are in-depth impressions (Fig. 2).

Discussion

We investigated the impressions which were different from the words explicit to the samples (e.g., ‘square’, ‘garden’, ‘rock’, ‘interior’, ‘desert’ and ‘works’ for the Folder Garden). We excluded these explicit words and few unspecific words (e.g., ‘interesting’) (see Table 2). We considered the rest of the words as original (creative) in-depth impressions.

Folder Garden:

Natural Fabrication:

That the natural-indicated impression was connected with creative imagination, judging both the weight and quantity of in-depth impressions. The in-depth impressions in the natural-indicated cases are stronger and less derived from the explicit features of the design works, thus probably more creative.

The particular findings of this research provide clues how creative imagination may be enhanced in the process of designing and how to design imagination-stimulating artefacts.