

Statistical Analysis of Preferences for Art Fashion

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I. INTRODUCTION

We proposed the concept of combining digital art and digital printing technology to wear art as fashion in everyday life. In addition, we constructed a production environment and confirmed that art fashion can be produced in a short time [1]. Wearing art in everyday life is a new experience, and it will be interesting to see what impressions people get of it. We took advantage of the opportunity of the art fashion exhibition and asked the audience to evaluate the art fashions using a questionnaire. This paper is the first report of the questionnaire analysis.

II. CREATED ART FASHION

As an art fashion design, we used the digital art "Sound of Ikebana" produced by Naoko Tosa, one of the authors. This is a video art created by using a high-speed camera to film the viscous fluid, such as paint, that is vibrated by sound and rises up to create a beautiful shape resembling "Ikebana." This is video art based on physical phenomena, creating organic, abstract and varied shapes. We created 12 types of cut-and-sews using images cut out from this video art as designs. This is shown in Figure 1. (The order is based on the results of the factor analysis described later.)

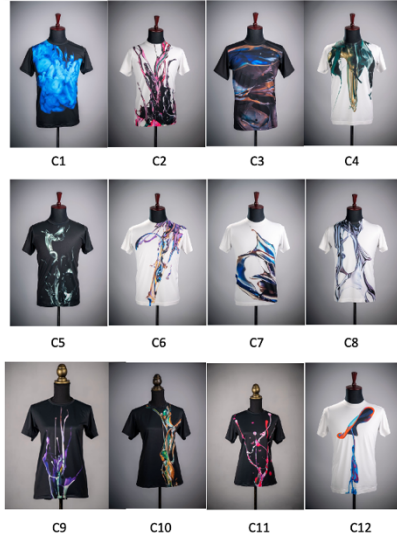


Fig.1. Twelve pieces of developed cut-and-sew fashion.

III. QUESTIONNAIRE AND BASIC ANALYSIS

When the created art fashion was exhibited at the Naoko Tosa's art exhibition in Tokyo, we conducted a survey for some of the visitors (35 people). The questionnaire asked about overall impressions such as "are you

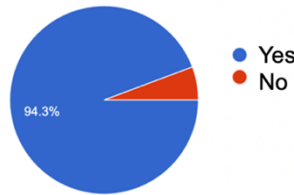


Fig.2. Responses to "Are you interested in the experience of wearing art?"

interested in the experience of wearing art?" and other evaluations in five stages.

IV. QUESTIONNAIRE AND BASIC ANALYSIS

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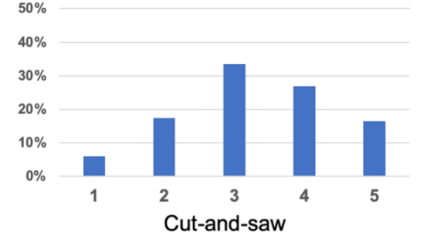


Fig.3. Averaged results for the question "Do you like this fashion?" for cut-and-sew.

TABLE 1. RESULTS OF FACTOR ANALYSIS FOR CUT-AND-SEW

Item	Factor1	Factor2	Factor3	Communarity
C1	.892	.069	-.230	.791
C2	.876	-.294	.330	.786
C3	.675	.261	-.059	.703
C4	.523	-.053	.086	.276
C5	.469	.389	-.081	.554
C6	-.023	.785	.136	.669
C7	-.039	.735	-.011	.504
C8	.205	.599	.107	.605
C11	-.077	.336	.147	.129
C12	-.003	.168	.109	.049
C9	-.036	.184	.803	.732
C10	.010	.100	.558	.355

Figure 2 shows the responses to the question "are you interested in the experience of wearing art?" showing that most people are interested. Figure 3 shows the distribution of the 5-point evaluation results for the question "do you like it or not?" 3 (average) is the most common, followed by 4 (somewhat like). Although there is a high level of interest in the concept, it looks that the evaluators are still hesitant about actually wearing the individual art fashion. Clearing this is a challenge when we want to turn art fashion into a business.

V. FACTOR ANALYSIS

Regarding "whether you like it or not," factor analysis was performed using the results of each evaluator's evaluation for each art fashion on a 5-point scale. Table 1 shows the results. (As C11 and C12 have a small contribution, the results are after excluding them and re-analyzing them.) Clothes where a design covers the whole clothes, and those with flashy designs are grouped into one group (C1-C5). We would like to conduct a more detailed analysis in the future.

REFERENCE

- [1] Yuya Amo, et al. "Development of Art Fashion by Integrating Art and Digital Textile Printing," EAI ArtsIT 2023, pp.415-428 (2022)