



Fig. 1. The textiles of the cultural properties. (a) Nishiki with beaded medallions enclosing hunting scene patterns on a green ground. (b) Nishiki with patterns of beaded medallions enclosing four mounted lion hunters. (c) Boar's head in roundel with pearl design border in brocade.

radius and transverse radius in the ovals. The ratio of longitudinal and transverse radius (longitudinal/transverse) was calculated. Then the ratio of transverse radius on outer circle, inner circle, and beaded medallion were calculated. Geometric properties of patterns of beaded medallions were supposed to depend on the weaving techniques. We made the circle patterns based on these patterns in textiles and varied the ratio of transverse radius among outer circle, inner circle and beaded medallion. The impression of the circle patterns drawn by the ancient people was noticed. Analysis of impression from the circle patterns was carried out.

(c)

Fig. 1. (continued).

2. Evaluation Procedure of Impression

2.1. Circle patterns

Examples of textiles with the patterns of beaded medallions are shown in Fig. 1 (MATSUMOTO, 1984; ZHAO, 1999). The names of the textile are (a) Nishiki with beaded medallions enclosing hunting scene patterns on a green ground, (b) Nishiki with patterns of beaded medallions enclosing four mounted lion hunters, (c) Boar's head in roundel with pearl design border in brocade. The ratio of transverse radius on outer circle, inner circle, and beaded medallion were (a) 1:0.85:0.066, (b) 1:0.75:0.11, (c) 1:0.69:0.098. We made the circle patterns based on these patterns of beaded medallions. The circle patterns were varied the ratio of transverse radius among outer circle, inner circle and beaded medallion. Radius of outer circle was maintained, and radius of inner circle was varied in sequence. Beaded medallions were sustained the center of the space between outer circle and inner circle. The number of beaded medallions in each circle was fixed 20. Beaded medallions were contacted each other if possible. The size of beaded medallions in each circle pattern was determined naturally. The ten kinds of the circle patterns were employed. The circle patterns are shown in Fig. 2. Beaded medallions are contacted each other in pattern D-1 to D-7. Beaded medallions were separated each other in pattern D-8 to D-10. And the ratio of transverse radius among outer circle, inner circle and beaded medallion of these circle patterns are shown in Table 1. These circle patterns are called singular circle patterns. And repeated circle patterns were made to evaluate another sight. Two types of repeated patterns