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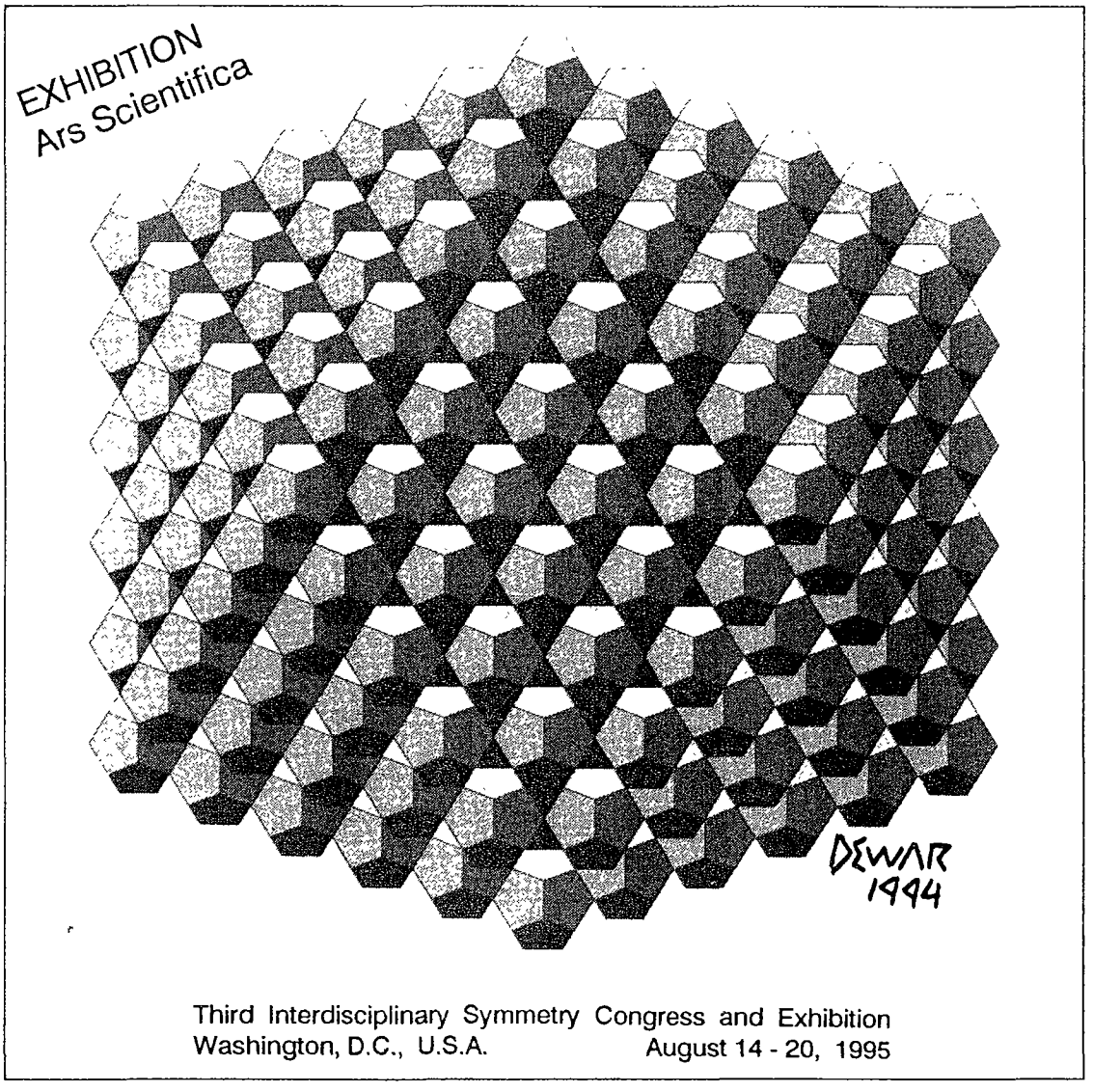

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POSSIBILITIES OF IMAGE-EXPRESSING BY MIRRORS

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Mirrors are instruments to create symmetrical shapes. A mirror is originally a tool for mirorring a face or a figure of a person. However, today we use it in many form of art and design. These works by mirrors give unique expressions to us. Especially, because of the various functions of a mirror and their wonderful visual effects of the image, many artists are eager to use mirrors in their works. I believe the basic study creating by a mirror is very useful to art and design education. So, I would like to make the common functions of mirror instruments clear. By examining the results in art and design, I have come to see the fundamental and basic characteristics of mirrors.

Well, are there any revolutionally new tools with mirror function in this high technology age? Through researching this problem, we can expand the category of mirrors. The newly founded functions in the new type of tools will enlarge the possibilities of expressions in art and design.

Fig.1 a V type mirror composition

a. plane surface mirrors (multiple uses)

By using them multiplly, plane surface mirrors create very interesting symmetric shapes.

a-1 a V-type mirror composition (Fig.2)

a-2 a ^{V}-type mirror composition (Fig.1)

a-3 a Δ-type mirror composition

a-4 a parallel type mirror composition (Fig.3)

a-5 a relief mirror composition (Fig.4)

a-6 a pyramid mirror composition (Fig.5)

a-7 a half-mirror

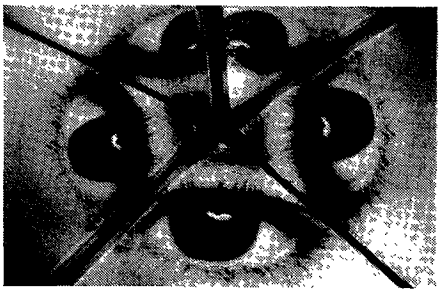

Fig.2 a V-type mirror composition

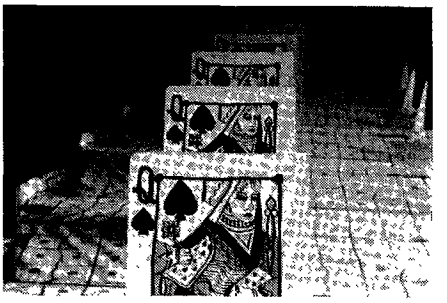

Fig.3 a parallel type mirror composition

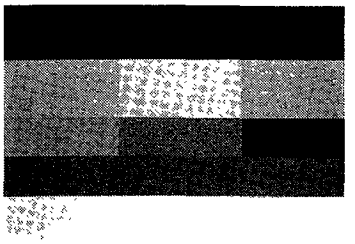

Fig.4-b-1 a colour board

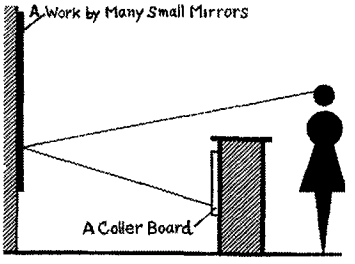

Fig.4-b-2 transmitting a colour

Fig.4-a-5 a girl appeared from many small mirrors

b. creations by curved mirrors

By using curved mirrors, we can have various sorts of deformed shapes.
(dissymmetry)

b-1 an inside surface reflection of two cylinder mirrors (on parallel lines, see Fig.6)

b-2 an outside surface reflection of a cylinder mirror (on parallel lines, see Fig.7)

b-3 a sphere-surface mirror composition (see Fig.8)

b-4 a cone-surface mirror composition(Fig.9)

b-5 a wave type mirror composition

b-6 another type of curved mirror composition

b-7 an anamorphosis

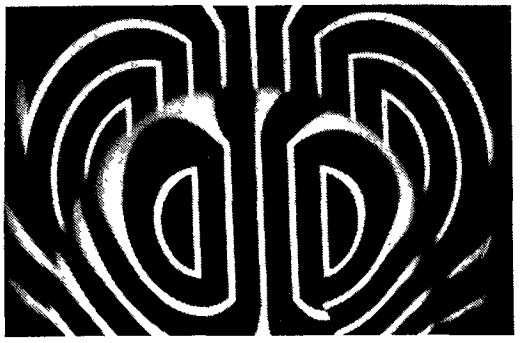

Fig.6 inside surface reflection of two cylinder mirrors

Fig.5 a dog appeared in a tree

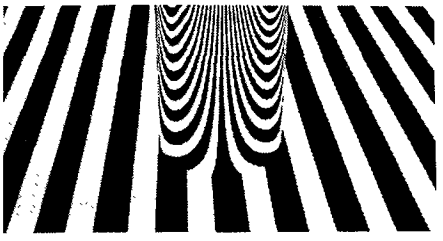

Fig.7 outside surface reflection of a cylinder mirror

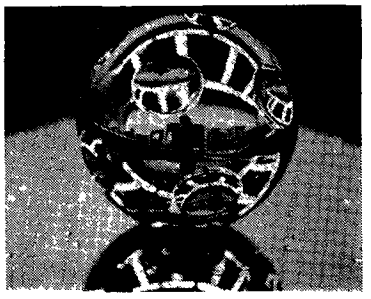

Fig.8 a sphere-surface mirror composition

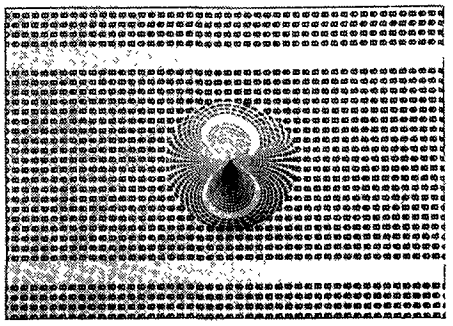

Fig.9 a white 8 appeared on many small black 8s

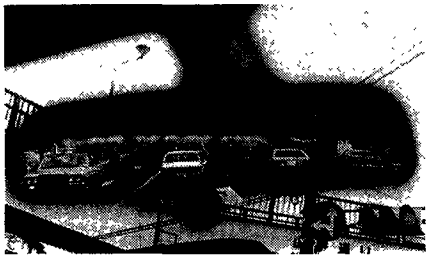

Fig.11 a back mirror of a car is transmitting shapes

c. conclusion-1: functions and characteristics in the creation by mirrors

(i) the functions of mirrors in art and design

c-1 composing shapes (Fig.10)

c-2 revealing shapes
c-3 transmitting shapes } (a back-mirror of a car, see Fig.11)

c-4 enlarging space

c-5 complicated shapes

c-6 increasing shapes

c-7 transforming shapes

c-8 immediatery making shapes

(i) the characteristics of mirrors in art and design

c-9 producing images ··· c-1, 4, 5

c-10creating bilateral symmetry (plane surface mirror) ··· c-2, 3, 6(Fig.12)

c-11creating transformed shapes (curved mirror) ··· c-7

c-12immeadiatly making shapes ··· c-8

d. conclusion-2: new types of mirrors in the high-technology age

d-1 televisions and video cameras (Fig.13)

d-2 hologram (Fig.14)

Fig.10 composing shapes (a poster of a diver in a window of which glass is reflecting the surroundings)

Fig.12 increasing shapes (bilateral symmetry)

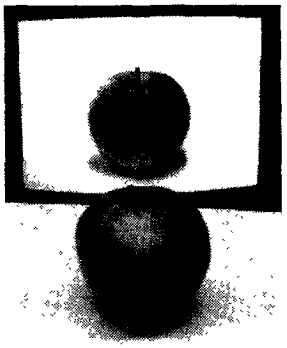

Fig.13 televisions and video cameras make the same shape instantly

Fig.14 an image by hologram (composing a shape)