

# AIC Color 97 AIC Couleur 97 AIC Farbe 97

Proceedings of the 8th Congress of the International Colour Association

Compte-rendu de la 8 journée de l'association internationale de la couleur

Tagungsbericht von der 8. Tagung der Internationalen Vereinigung für die Farbe

Volume II

Kyoto, Japan May 25-30,1997

The Color Science Association of Japan

## INTERNATIONAL COLOUR ASSOCIATION ASSOCIATION INTERNATIONALE DE LA COULEUR INTERNATIONALE VEREINIGUNG FÜR DIE FARBE

© 1997 by Color Science Association of Japan and individual contributors ISBN 4-9980598-0-7 (2-2)

Published by Color Science Association of Japan Nichika Bldg., 2-12-14 Hamamatsucho, Minato-ku, Tokyo 105, Japan

Printed in Japan

### The Social Representation of the Individuals through Color and Cesia in Clothing

Patricia M. DORIA

The aspects of visual appearance that vary with the spatial distribution of light and differ from color, shape and texture have been encompassed under the generic term *cesia*. Cesia depends, physically, on light transmission or reflection, either specularly or diffusely, and on the light absorbed by the materials. As regards the perceptual aspect, it is related to the visual categories of transparency, translucency, opacity, gloss, matte quality, etc. [2]. The fabrics used for dressmaking, according to their physical composition, present several degrees of permeability to light, and they also produce different light absorption or diffusion levels, thus creating cultural standards and norms, which are as important as color is.

#### 1. INTRODUCTION

In the case of dress, the different degrees of light transmission and reflection that are produced in the material with which it is made affect its surface appearance. The dress is a sign, a communication tool and, as such, it transforms the real body, turning it into an ideal body imposed by the mode: it modifies, lengthens, enlarges, reduces, enhances, slims. The mode can make any real body surrender to its proposed structure. For different situations of social behavior, such as working, dancing, war, free time, membership group, etc., the subject dresses in order to act as a "being for doing", modifying his own situation or adapting it to the environment in which he must develop his activity.

Through the variations in the visual perception of clothes, the sensations of seduction, concealing, protection, dehumanization, body selection, connotation and so on, also vary. Transparencies, gloss, opacity, translucency, etc. develop appearances that serve as a means or a link in the visual representation of the individual and his relation to others through the dress. One interesting aspect in the dress is the dialectics between opacity and transparency. These two variables indicate the degree of dress visibility: the opaque one, in its highest degree, as it reflects the light it receives, and the transparent one, in a null degree (ideal transparency), as it lets through all the light it receives and, thus, the dress becomes totally invisible. The state of ideal transparency is impossible in practice; for that reason, mid terms are taken into account: openwork or semitransparencies (veiled or veiling). In fact, when dealing with transparency in its broad sense, as a variable and not as a specific case, we refer to a certain range of semitransparencies and not to the ideal transparency. In these terms, Barthes explains that there are no differences in intensity, since the differences are only connected to the aspect: the openwork is a continuous visibility (knitwear or crochet work), whereas transparency is a tenuous invisibility (tulle, muslin, plastics). Everything that breaks the opacity of dress, whether in length or thickness, belongs to the variable of transparency [1].

#### 2. METHOD OF ANALYSIS

Both the dress, taken as a global sign, and its visual appearance with respect to the spatial distribution of the light it emits, which is a particular component sign belonging to the dress, fulfill semiotic functions. Basically, they fulfill syntactic functions (when related to signs of their own type), semantic functions (when related to the objects they denote) and pragmatic functions (when related to the users or interpreters of those signs). We will now see the semantic aspect of the spatial distribution of light in the dress, as well as its development in the social history of costume.

With respect to the semantic function, cesia, like color and other appearance modes, is a sign which is capable of showing certain physical characteristics or properties of the material, and in this case, the cesia signs work as indices. An index is a sign that denotes its object from having a physical contiguity relation with it. Materials can bring about very different appearances according to their surface finish and the type of lighting it receives. For instance, in the case of an article of clothing made in velvet, it can be seen that it reflects light in different ways, depending on the orientation of fibers. According to the direction the fibers take, in one way, some specular reflection can take place or, in another orientation, a further light absorption is produced. Thus, the attire looks darker and more opaque. As a consequence, in this case, it its through visual appearance that we are able to discriminate between velvet and another kind of fabric (see Fig. 1).

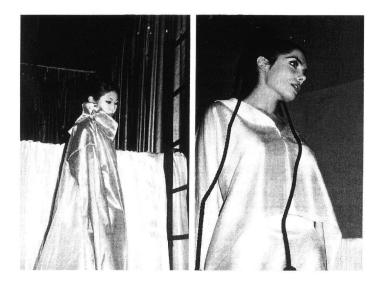


Fig. 1: Translucency and gloss in dress designs (Chi Hyun Yun, dress designer)

In other cases, and still within the semantic domain, the role of cesia in the attire is to act as an icon, i.e., as a sign related to its object by means of some type of resemblance, whether it is directly perceived or suggested by a psychological association. For instance, transparency is taken as a sign of lightness or looseness, as opposed to the heavy status suggested by an opaque garment. Transparency and opacity are also taken by dress designers to go through their designs and determine a reading of specific body sectors, thus dominating and directing people's looks towards certain areas to look at in that body.

In dress, the cesias usually have conventional or social meanings as well; so, they become symbols. Brightness in clothes, for instance, presents luxury and wealth connotations, because it is a kind of visual quality common to precious stones and metals. The *aymara* aborigines from the Andean *altiplano* tell of a legend in which *Illa* (shine) is a category of light used to classify metals, precious stones, or even lightning, as objects that emit a non-solar light. Silver is taken to be a possession of the gods, due to its brightness and to the fact that it comes from deep inside the Earth. By definition, silver is also a female metal, if worn as a body ornament. The *sekil*, which is an Araucanian garment, denotes adulthood in a woman, and her lady-condition. This garment is likely to show an opaque gloss, a dim, selenite light, more of a white hue and as detached as possible from yellow, the color of the sun.

These visual qualities of gloss or iridescence are represented in Italian Renaissance paintings, in the costumes worn by the characters depicted there. This effect called *cangiante*, was used as a means of expression, which gave the characters a supernatural aspect. In a document dating from 1311, the Basilica of San Francisco is described as *lumen et status salutifer ... totius civitatis et districtus Asisij* (the light and salubrious condition . . . of the entire city and the district of Assisi). Gage points out that it is possible that the use of the term *lumen* was casual but he also adds that it would match the character of the decor exactly [3]. It would be striking to have associated it to textile fabrics, in which the medieval spectator showed a greater interest in color and in light emitting surfaces or thick glass, which hold light back. These were replaced by smooth textures on fabrics, the beauty of the latter depending on the incidence angle of light on the surface of their folds. The luminous effects on the figurative scenes were achieved by means of using authentic gold in Hispanic silk fabrics and in the golden clothes. These were used as a model for dress paints and gave the characters an interior light, which revealed their morality, intellect, richness and spirituality to the observer.

With respect to the pragmatic function of cesia in dress, in some combination of materials, the light transfer produced in them makes it possible to perceive a certain type of visual illusions. In the case of an openwork garment, or the ones having lace, and, from a certain distance, the eye makes an additive mixture of light reflected both by the garment's fabric and by the skin behind, and it records a plain but translucent surface. This type of cesia sensations can be termed illusory sensations, and can be classified within the domain of pragmatics, as they are signs that cause a certain effect in the person who interprets them.

Other examples of pragmatic use of cesia signs in dressing are the suits with a camouflage pattern, worn by military men to disguise themselves against the background. They are made with matte finish paints in order to avoid reflections and gloss. A material is said to be matte or semimatte when it is opaque and the flux is mainly diffusely reflected. This diffuse reflection in military clothes makes the individual less visible; it allows his behavior to be unnoticed with respect to light, in a similar way to the environment that surrounds him (generally, the natural environment: vegetation, soil, etc.).

In the case of armors, fireproof suits (*keblar*) or astronaut suits, which are made in very polished (bright) materials or metallic ones, the pragmatic use of cesia as a sign is also present. These suits offer physical protection and, at the same time, they isolate the user from the surrounding world, defending and transfiguring him into a metallization linked to metal symbolism and their subsequent characteristics of splendor, duration and gloss. We can see that, in these cases, a sharp, specular reflection is produced, and it generates a sensation of dehumanization in the wearer, a feeling of distance from his body with respect to other bodies. This fact is due to the metallic texture finish.

In the sixties, designers like Paco Rabanne and Pierre Cardin linked the concepts of future, spatial voyages and discoveries to their catwalk presentations of metallic attire, evening dresses made with aluminium sheets joined by metal threads.

#### 3. CONCLUSION

All these semiotic uses of the different spatial distributions of light in the dress also determine the reason why a metallic, bright, transparent or opaque attire is accepted or rejected by certain social groups in different timetables and contexts. As it can be seen, cesia in dress creates cultural standards and norms and it also affects the surface appearance of dress. It is in this way that appearances that serve as a link in the social representation of the individual and his relation to other people are built.

#### REFERENCES

- 1. BARTHES, Roland, Systeme de la Mode. Spanish transl. by J. Viñoly Sastre, Sistema de la Moda, G. Gili, Barcelona (1967).
- 2. CAIVANO, José Luis, Cesia: A system of visual signs complementing color. Color Research and Application 16 (4), (1991), pp. 258-268.
- 3. GAGE, John, Colour and Culture, Practice and Meaning from Antiquity to Abstraction. Spanish transl. by A. Gómez Cedillo, Color y Cultura, Siruela, Madrid, p. 76 (1993).

#### AUTHOR'S ADDRESS

Patricia M. DORIA

Secretary of Research, School of Architecture, Design and Urbanism, Buenos Aires University, Ciudad Universitaria, Pav. 3, 4th floor, 1428 Buenos Aires, Argentina