

evidence

Transparency

Trapp, Feible

T. M. G. 1968



1. The idea that α ^{probably} would not vary linearly with ~~the~~ perceived transparency is not new. To Mordant, Duns, Barlow.

Not accepted because the reduction of formulas which were fundamentally right was based on Talbot's theory

2. The fact that perceived t_M ^{transparency} is much more nearer to α_M than to α is an important fact, but less than it appears at first. α is not wrong, because the order is always respected: if $\alpha_{M_1} > \alpha_{M_2} \rightarrow \alpha_1 > \alpha_2$. It is only necessary

to calculate a correction, or a table of correspondence.
Proof: Gelman's curve expressing the spatial distortion of an object as a function of the degree of transparency measured by α

3. Model based on color differences

Why not begin with the simplest case of achromatic colors? Can be a gray seen as a mixture of white and black? The case of orange or blue-green is phenomenally difficult.
b) Highlighted can be avoided and therefore cannot play a basic role

- c) contrast effect: red-orange-yellow. Red induces green, and yellow induces blue. And then?

How can I ever trust any body observing contrast effects, ^{former} ~~unnoticed~~ variations? We never had spontaneous amodal descriptions

4. Color matching corresponds with what I called evidence of transparency, as contrasted with degree

5. Similarity of p to a and of p to τ . Either it repeats the formula or it is supposed that seeing similarity, ~~or~~ better its degree, is a hint to transparency. But then it being is supposed before being perceived.

6. "Transparency is the result of encoding the reduced difference between the color stimulus p and q as due to a transparent color t , overlying the stimulus colors a and b ."

a) This is theory with no regard to phenomenology

b) It supposes transparency ~~to~~ preceding the information ~~*~~

(circularity)

7. If the lightness difference between p and q is ~~the~~ zero, then transparency is zero. etc. Both ~~affirmations~~ assertions are valid for ~~t~~ as well as for α_m . Therefore the assertion that transparency is function of lightness and not of albedo level in this case no basis
look text

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a) The fact that we are not able to interpret the meaning of multiplication of albedos or lightnesses, or that the perceptual meaning of a formula is not clear is not reducing the validity of a rigorously derived mathematical equation.

b) The fact that ~~the same~~ there are several patterns of color relationship is ~~not~~ ^{not} a ~~violation~~ ^{violation} to the validity of the t equation

c) The greater dispersion of evaluations of t depends on the necessity of comparing a transparent color with an opaque one. I suspect that there is something similar as the Bezold Brücke phenomenon / ^{the} ~~trans~~-caveat

9. This is a well known fact (see 9 yellow)

Why encode the reduced difference between the stimulus color

p. 26 What is the "transparency" of the filter?
the physical transmittance? In this case, α being a plane
measure it has nothing to do with α_H .

If α is not a measure of physical transmittance, the
deduction is not valid. Why $p = \alpha a$?

Se la riflessione è espressa dalla legge di Falbot,
allora nell'equazione $p = \alpha a + (1 - \alpha) t$, $\underline{a}$ e $\underline{t}$ sono espressi in
termini di riflettanza. α è un coefficiente che rice in che misura in
riferimento a p e q .

Usando per $\underline{a}$ e $\underline{t}$ delle misure separate. Varia il coefficiente α
cioè il coefficiente che rice in che grandezza vanno posti $\underline{a}$ e $\underline{t}$
perché la loro misura sia uguale a p .

Tale coefficiente varia al variare della differenza fra p e t e rimane
col crescere della differenza fra a e t

$\underline{a}$	$\underline{b}$	$\underline{t}$	
$\underline{a}$	$\underline{b}$	$\underline{q}$	$\underline{b}$
$\underline{a}$	$\underline{b}$	$\underline{q}$	$\underline{q}$
$\underline{a}$	$\underline{b}$	$\underline{q}$	$\underline{q}$
$\underline{a}$	$\underline{b}$	$\underline{q}$	$\underline{q}$

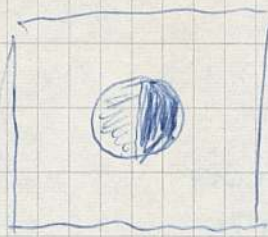
colore $\underline{t}$
misura

general. $\underline{t}$
invalut. $\underline{t}$.

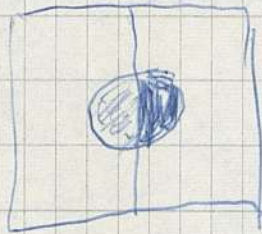


Nel caso dell'iperbolica si può vedere l'effetto della variazione regolare
del coefficiente: p. es. $\frac{1}{10}, \frac{2}{10}, \frac{3}{10}$ ecc.
nel contempo varia p .

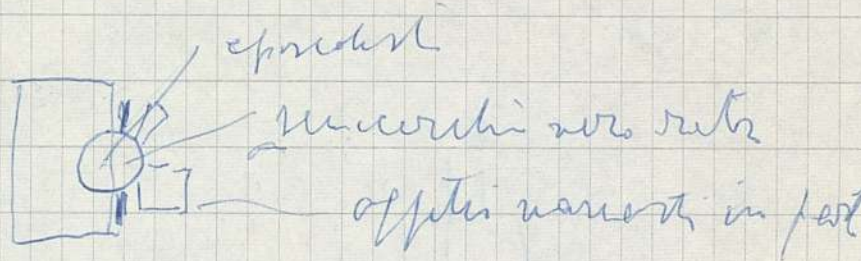
Using Russell values a better approximation
to preferred transparency is obtained than
using physical values



var. oggetti



oggetti simili
in parte



usando l'episcopi in un campo bicolore, con un
dei due colori uguale a quello dell'episcopi, si
ottiene la trasparenza parziale o completa!



Comunque in quest'atto è naturale riferirsi al colore rosso per
individuare la trasparenza

che relazione c'è fra trasparenze in un colore, trasparenze
parziali nell'altro colore e trasparenze complete in un colore?



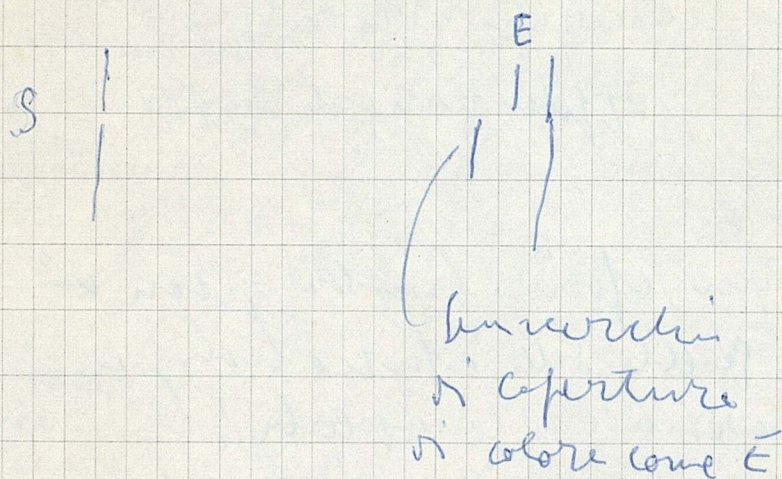
Il problema studiati con l'epurcolista

1. appungere poco al nulla
 appungere poco al ~~più~~ sotto
 appungere per el molto
- } aperta cura
 con accelerazioni
 negative, comuni per
- ↑ } tr
 ↓ } cura
 con
 acc.
 posit.

nuova soggettiva e oggettiva

nuova fra due pesi

Importante lavorare con l'epurcolista la tras-
 parenza parziale perché è più facile perdere il
 grado di trasparenza



$$p = 2a + (1-2)t$$

$$0.2 \cdot 0.7 + 0.8 \cdot 0.6 = 0.5$$

$$0.5 \cdot 0.4 + 0.5 \cdot 0.6$$

3

Il più timore costante anche
 p (oltre a t), variando a

ma forse è più importante avere
 costante a