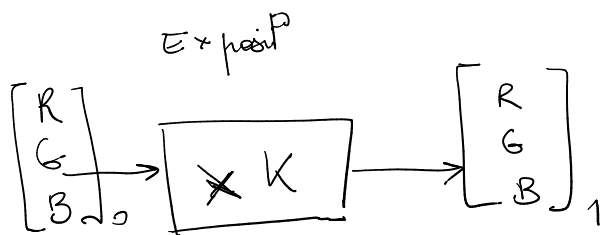
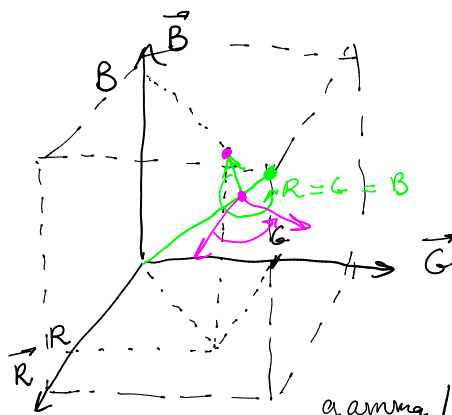


$\begin{bmatrix} R \\ G \\ B \end{bmatrix} \rightarrow \begin{cases} \text{luminance ?} \\ \text{saturation ?} \\ \text{teinte ?} \end{cases}$

$Y = aR + bG + cB, a+b+c=1$   
 $\approx \max(R, G, B) = L$

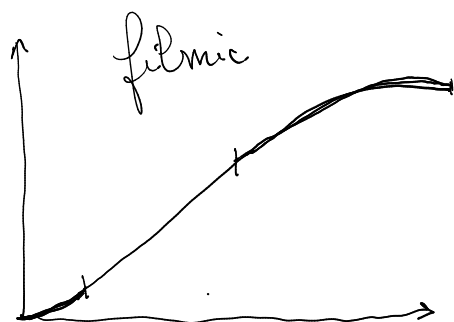
$\begin{cases} r = R/L \\ g = G/L \\ b = B/L \end{cases}$  chrominance



$R_1 = R_0 \times K$   
 $r_1 L_1 = r_0 L_0 \times K \rightarrow \begin{cases} r_0 = r_1 \\ L_1 = K L_0 \end{cases}$

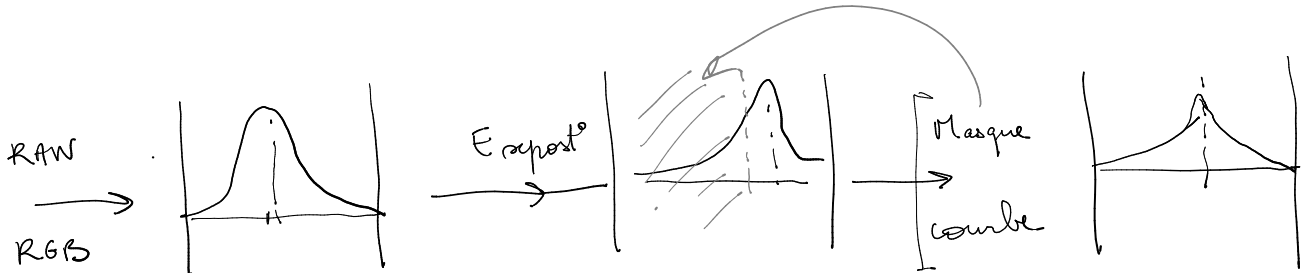
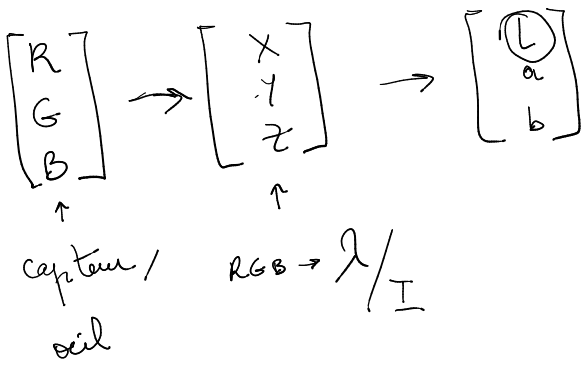



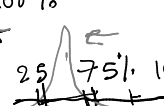
$R_2 = R_1^\gamma$   
 $r_2 L_2 = (r_1 L_1)^\gamma \rightarrow \begin{cases} r_2 = r_1 \neq r_1 \\ L_2 = L_1^\gamma \end{cases}$



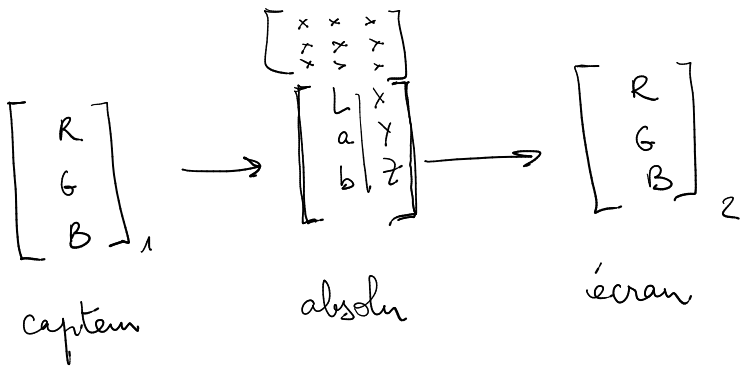
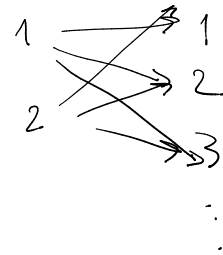
$\begin{bmatrix} r_0 \\ g_0 \\ b_0 \end{bmatrix} = \begin{bmatrix} R_0/L \\ G_0/L \\ B_0/L \end{bmatrix} \xrightarrow{f(L)} L \times \begin{bmatrix} r_0 \\ g_0 \\ b_0 \end{bmatrix} = \begin{bmatrix} R_1 \\ G_1 \\ B_1 \end{bmatrix}$

$y = f(L)$



courbe:  75% 100%  
 exposition / 2:  25% 75% 100%

102 =



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