

# Enjeux artistique spécifiquement liés au logiciel libre

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- méthode d'élaboration :
  - travail en commun
  - contrôle de versions (versions, branches, fork)
- codeur : artiste / artisan
- détournement / hack de logiciels libres
- licences

# élaboration en commun

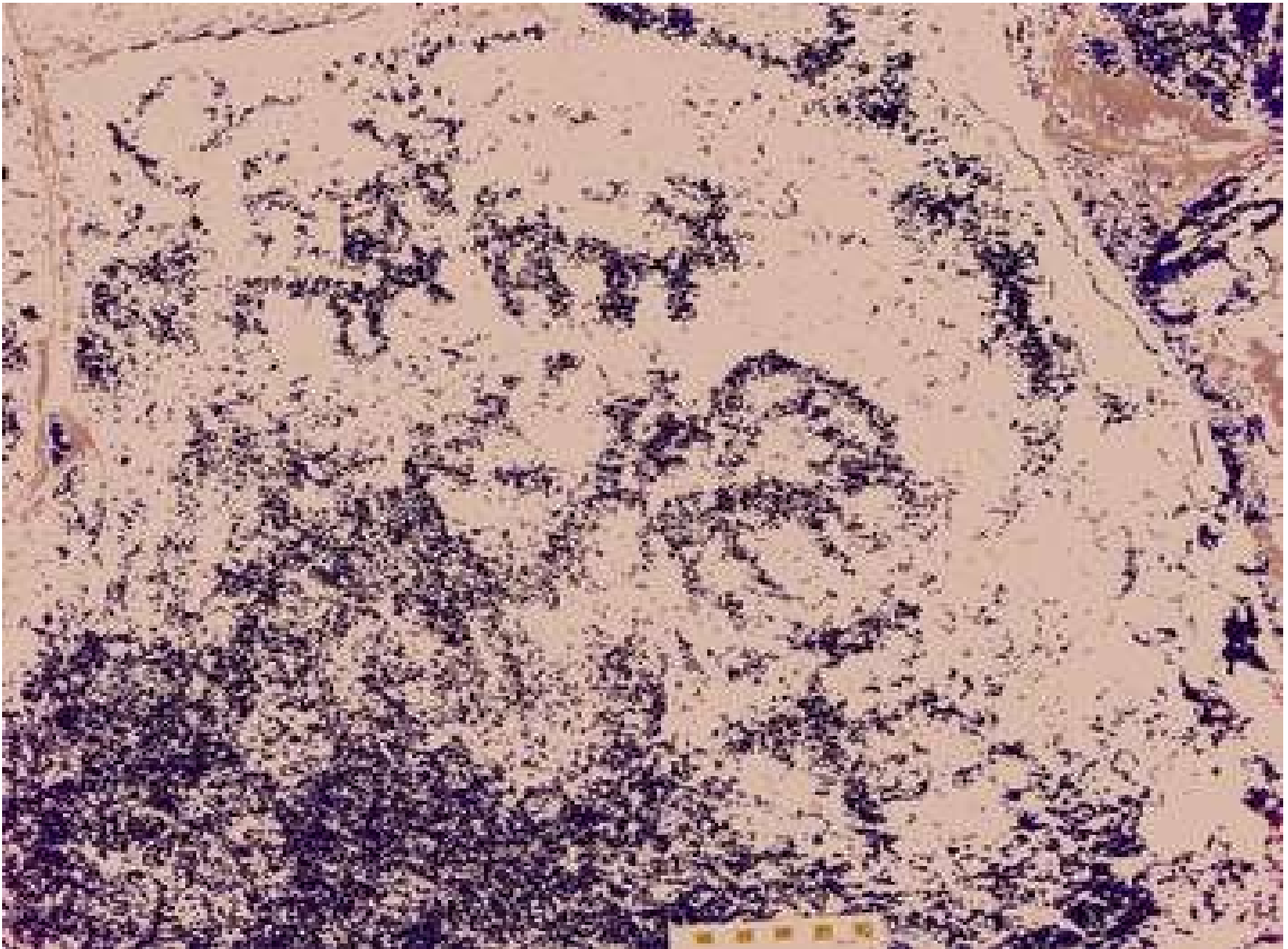
- ~~artiste romanesque dans sa tour d'ivoire~~
- auteurs multiples
- sensibilités différentes
- rebondissements
- etc.

# contrôle de versions

- poïétique
- fork
- branches









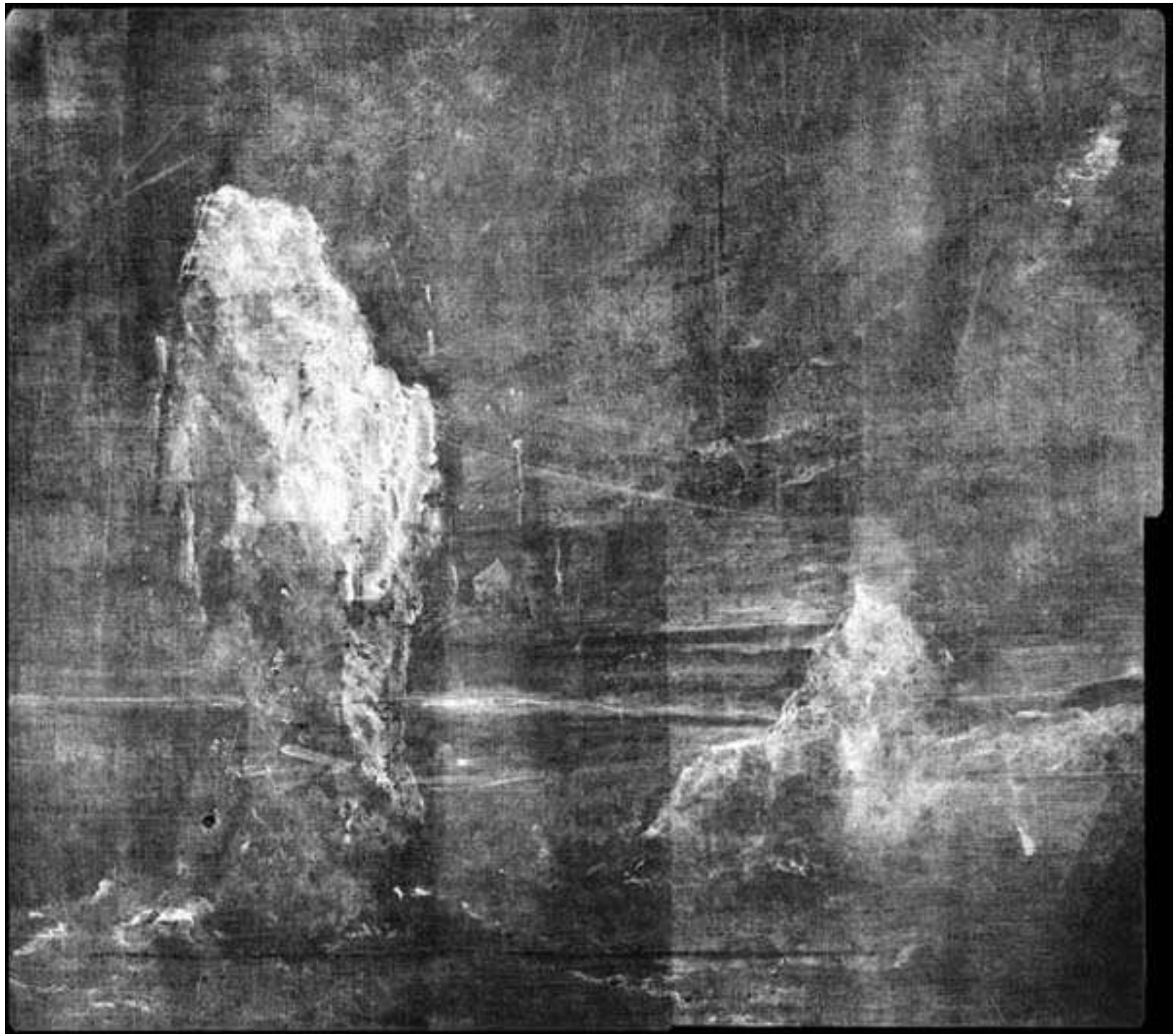
rayons x



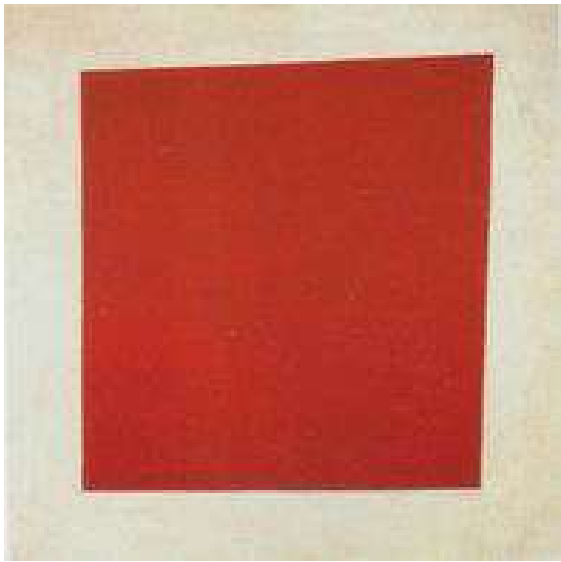
infra-rouge



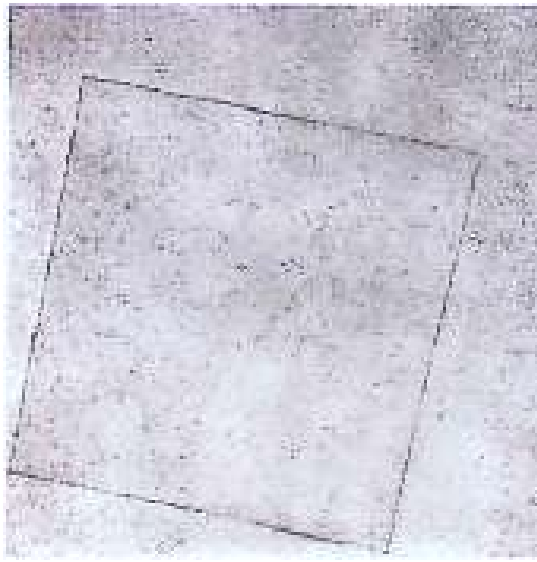




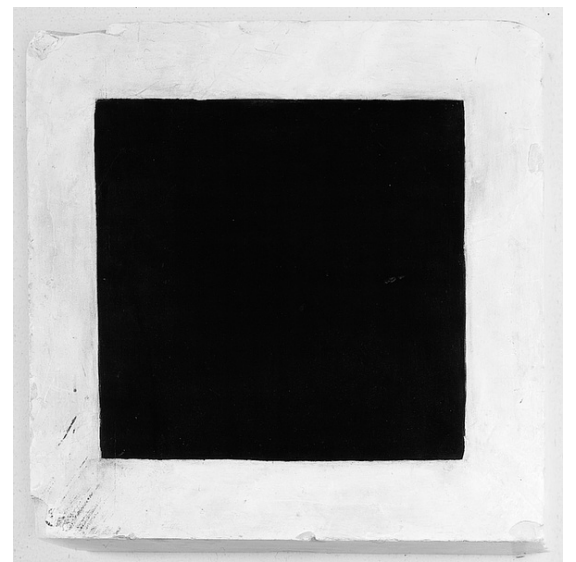
# versions / séries



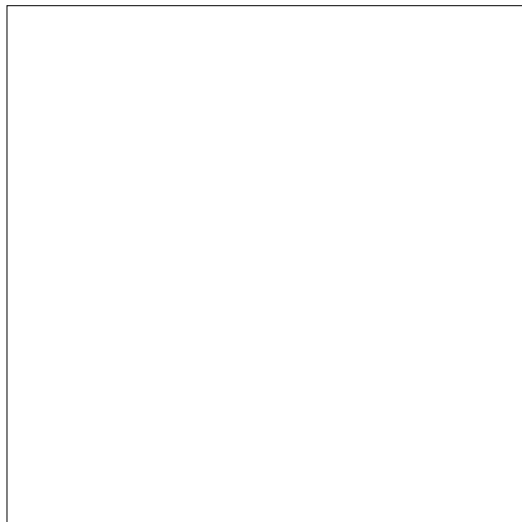
1915



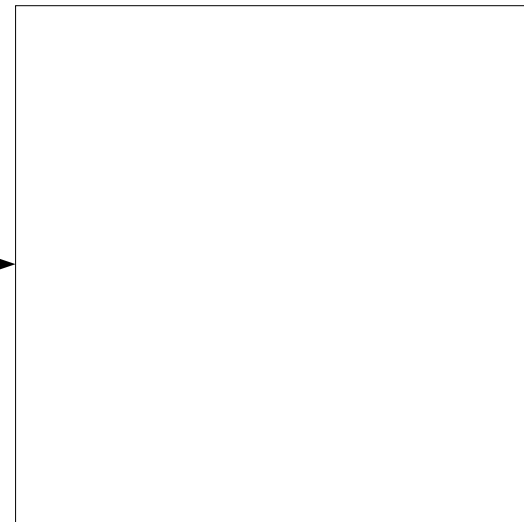
1918



1923



CVS / poïétique



carré blanc sur fond blanc

carré blanc sur fond blanc

# code source

- artisan :
  - manière de coder
- artiste :
  - utilisation du code source à des fins artistiques

# Brian Westley

## The International Obfuscated C Code Contest 1990

```
char*lie;
```

```
double time, me= !0XFACE,
```

```
not; int rested, get, out;
```

```
main(ly, die) char ly, **die ;{
```

```
signed char lotte,
```

```
dear; (char)lotte--;
```

```
for(get= !me;; not){
```

```
1 - out & out ;lie;{
```

```
char lotte, my= dear,
```

```
**let= !!me *!not+ ++die;
```

```
(char*)(lie=
```

```
"The gloves are OFF this time, I  
detest you, snot\n\0sed GEEK!");
```

```
do {not= *lie++ & 0xF00L* !  
me;
```

```
#define love (char*)lie -
```

```
love 1s *!(not= atoi(let
```

[get -me?

(char)lotte-

(char)lotte: my- \*love -

'I' - \*love - 'U' -

'I' - (long) - 4 - 'U' ])- !!

(time =out= 'a'));} while( my -  
dear

&& 'I'-11 -get- 'a'); break;}}

(char)\*lie++;

(char)\*lie++, (char)\*lie++; hell:0,  
(char)\*lie;

get \*out\* (short)ly -0-'R'- get-  
'a'^rested;

do {auto\*eroticism,

that; puts(\*( out

- 'c'

-(('P'-'S') +die+ -2 ));}while(!"you're at it");

for (\*((char\*)&lotte)^=

(char)lotte; (love ly) [(char)++lotte+

!!0xBABE];){ if ('I' -lie[ 2 +(char)lotte]){  
'I'-11 \*\*\*die; }

else{ if ('I' \* get \*out\* ('I'-11 \*\*die[ 2 ]))  
\*((char\*)&lotte) -=

'4' - ('I'-11); not; for(get=!)

get; !out; (char)\*lie & 0xD0- !not) return!!

(char)lotte;}

(char)lotte;

```
do{ not* putchar(lie [out
*!not* !!me +(char)lotte]);
not; for(;'a');}while(
    love (char*)lie);{
```

register this; switch( (char)lie

```
[(char)lotte] -1s *!out) {
char*les, get= 0xFF, my; case' ':
*((char*)&lotte) += 15; !not +(char)*lie*'s';
```

this +1s+ not; default: 0xF +(char\*)lie;}}}

```
get - !out;
if (not--)
goto hell;
    exit( (char)lotte);}
```



# outils et supports destinés à la création

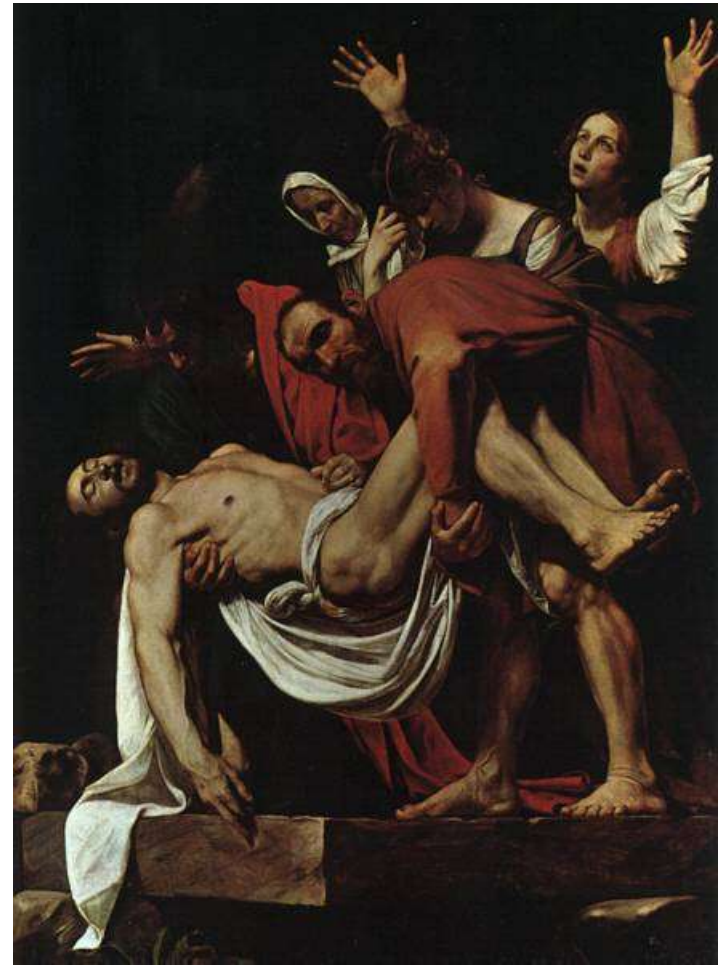
- peinture :
  - pigments
  - toile
  - pinceaux
- logiciels :
  - gimp
  - photoshop

# utilisation classique

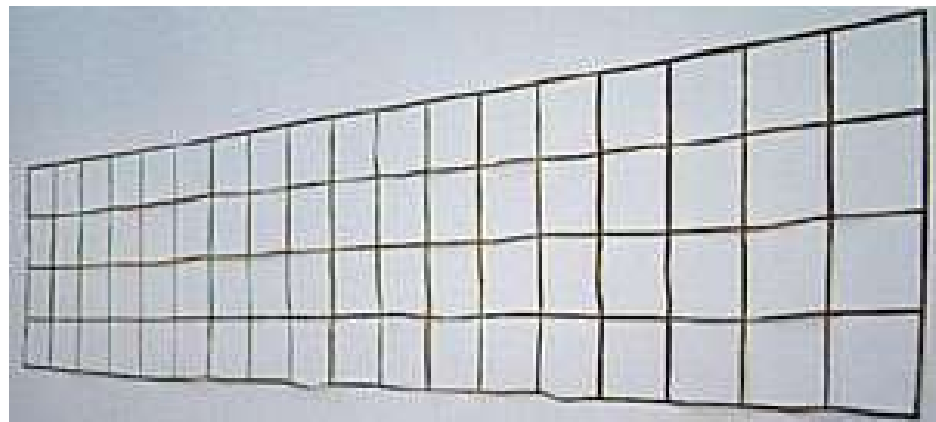
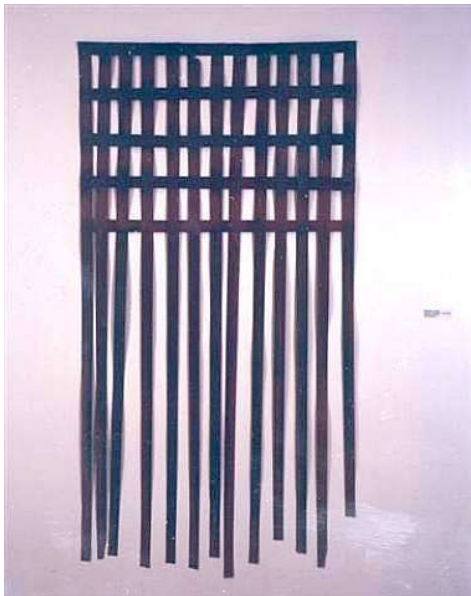
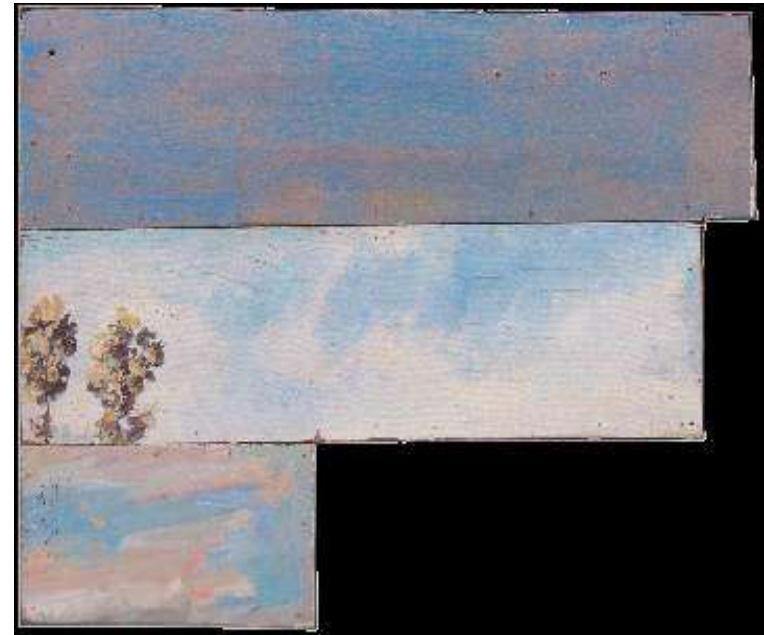


+

=



# détournement du support plastique



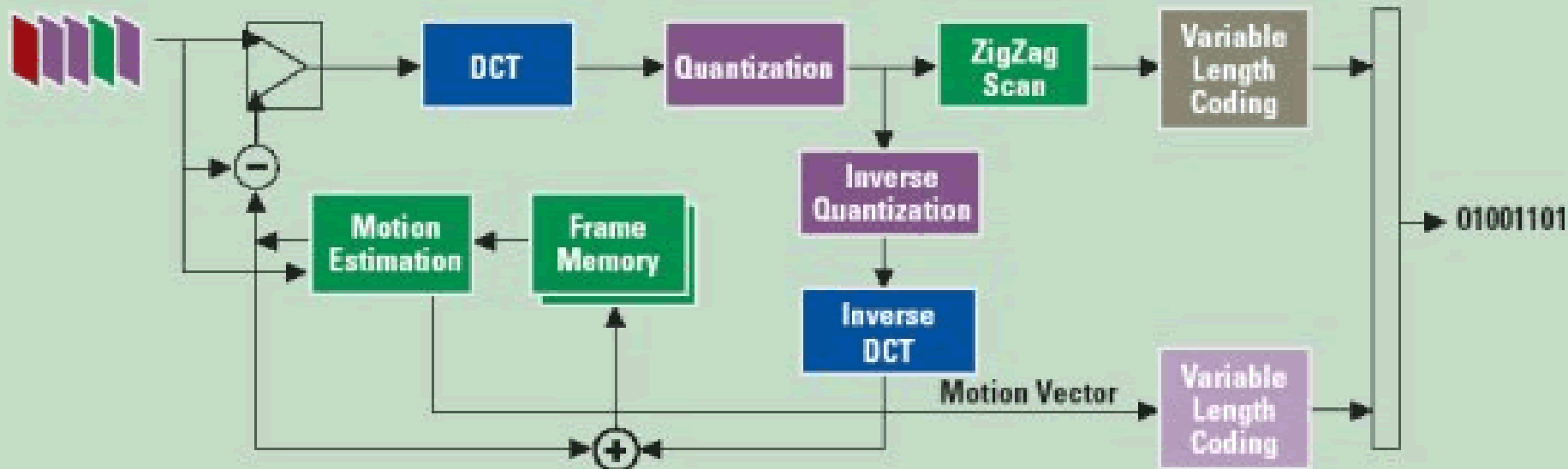
# détournement du support numérique

- logiciel propriétaire :
  - hack binaire interdit et/ou limité
- logiciel libre
  - accès au code source
  - étude
  - modification
  - compilation

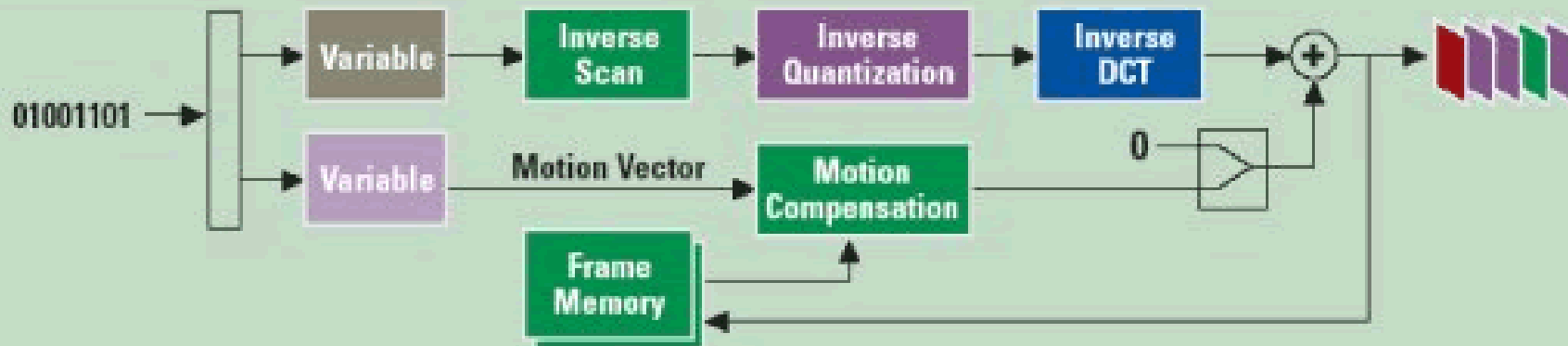
Exemple de hack d'un codec MPEG-4  
à des fins artistiques :

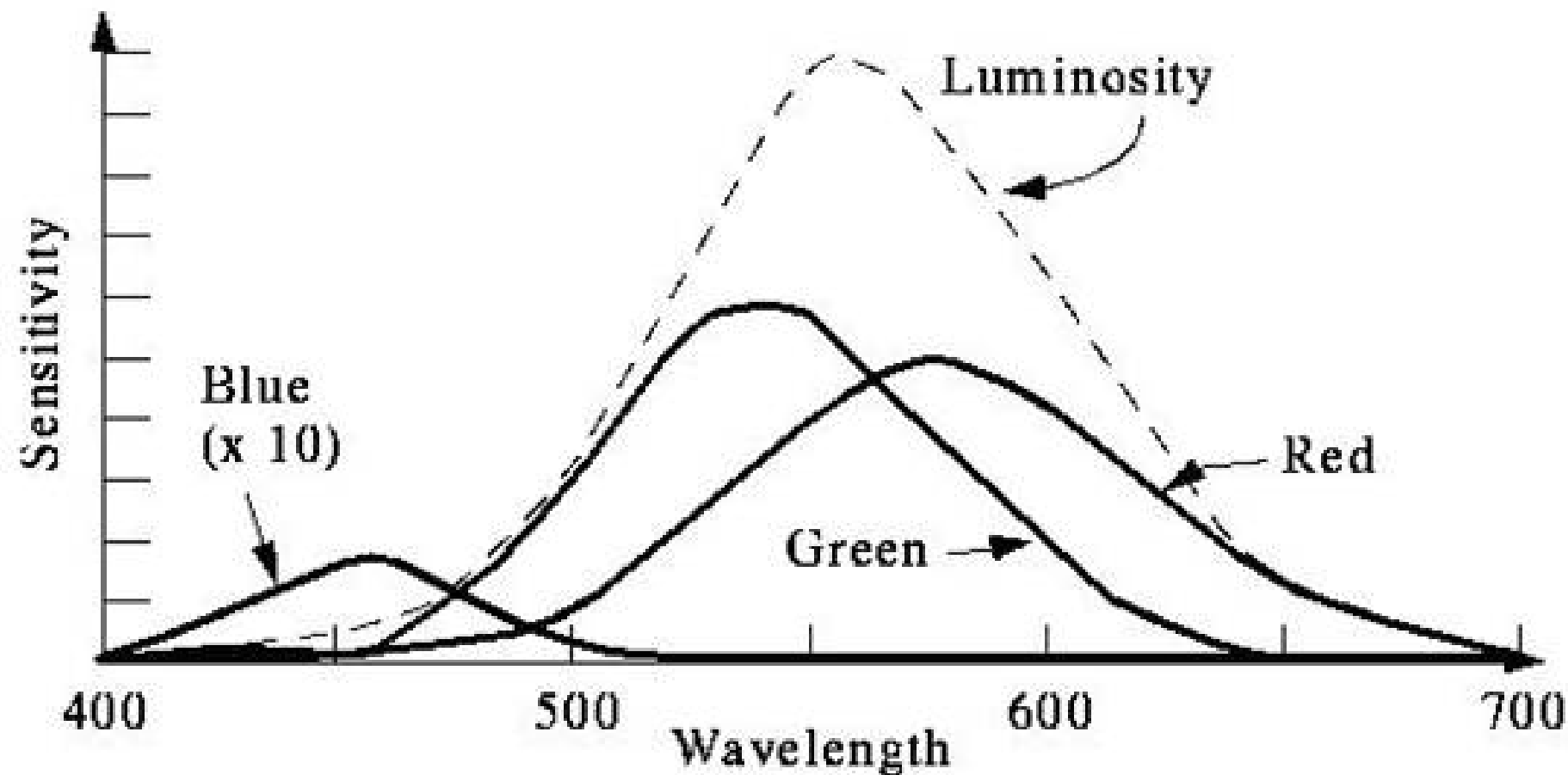
Divx Prime (Xvid hack)

## Encoder

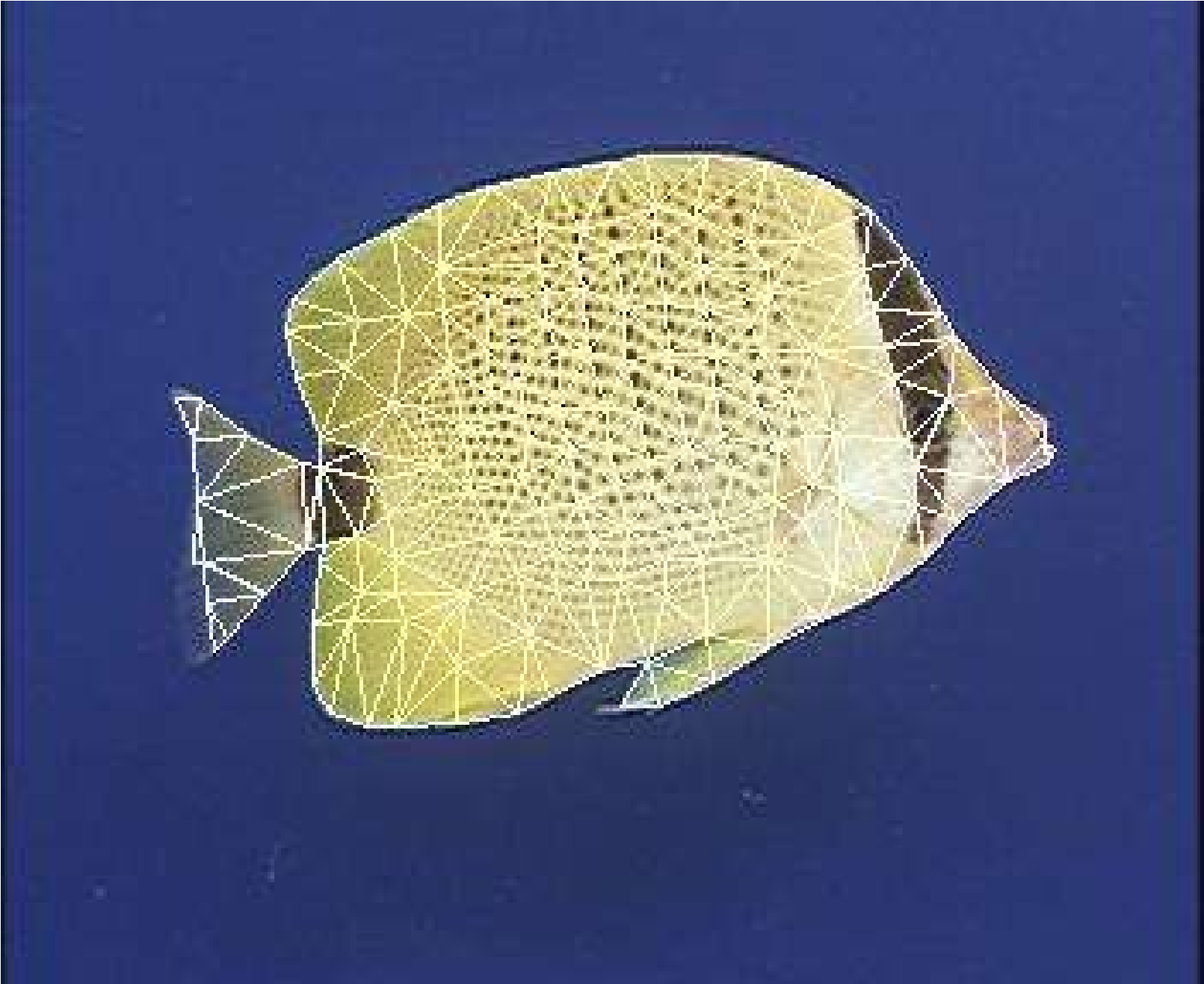


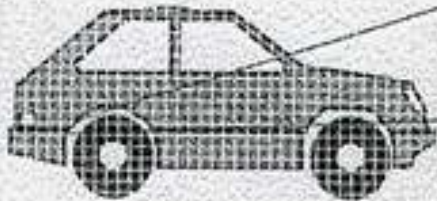
## Decoder



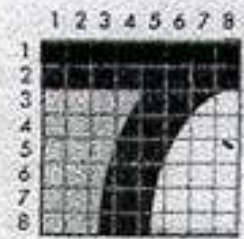


$$F(u, v) = \frac{2}{N} c(u).c(v) \sum_{x=0}^{N-1} \sum_{y=0}^{N-1} \text{Img}(x, y) \cdot \cos \left[ \frac{\pi}{N} u \left( x + \frac{1}{2} \right) \right] \cdot \cos \left[ \frac{\pi}{N} v \left( y + \frac{1}{2} \right) \right]$$





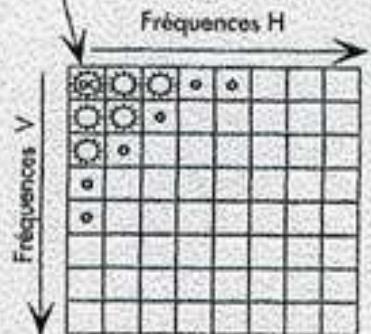
Macrobloc



Bloc

DCT et quantification

Énergie maximale  
composante continue  
valeur moyenne du bloc

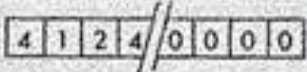


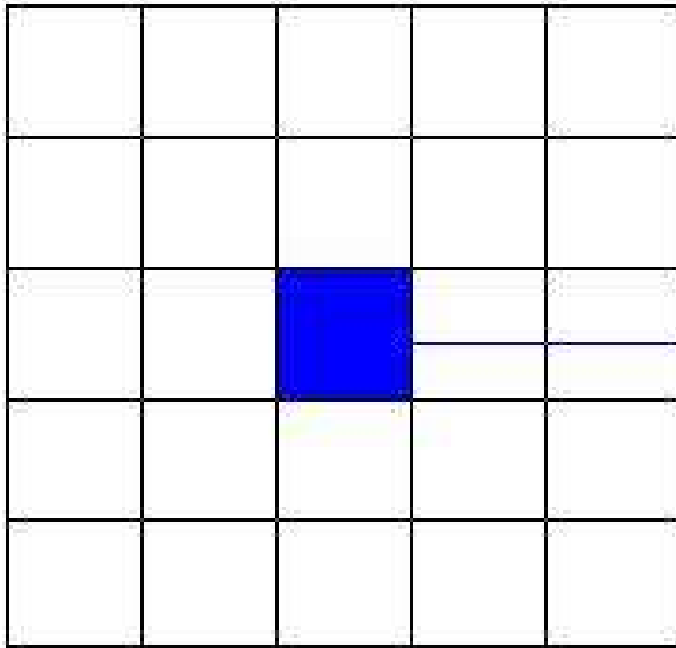
Matrice DCT

4	1	3	0	0	0	0	0
2	1	0	0	0	0	0	0
4	2	0	0	0	0	0	0
1	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0

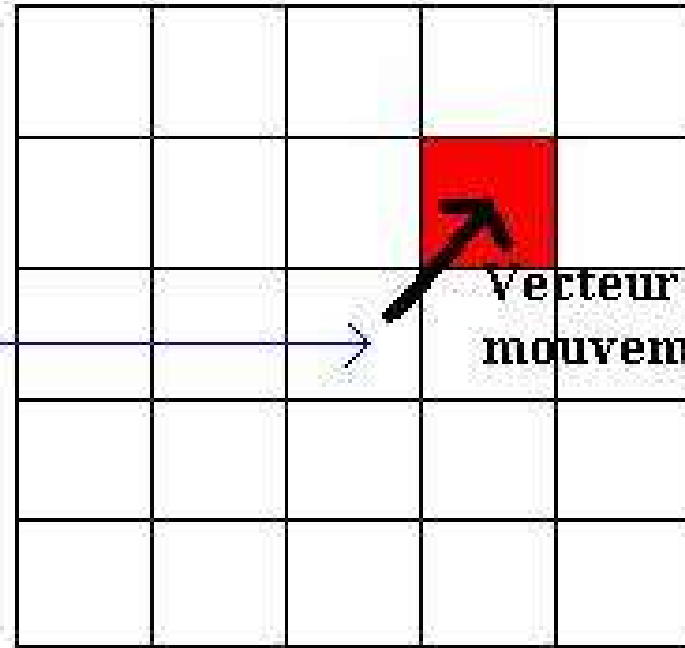
Balayage en zigzag

Codage à longueur variable  
et codage entropique





*Image de référence*



*Image courante*

Vidéo1

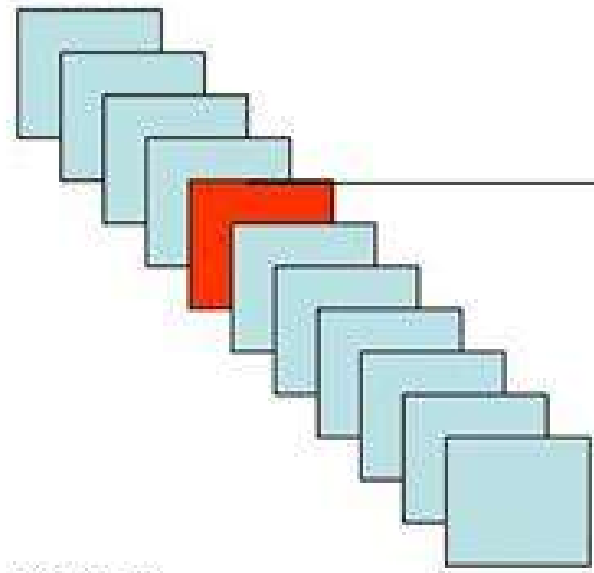
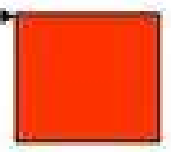
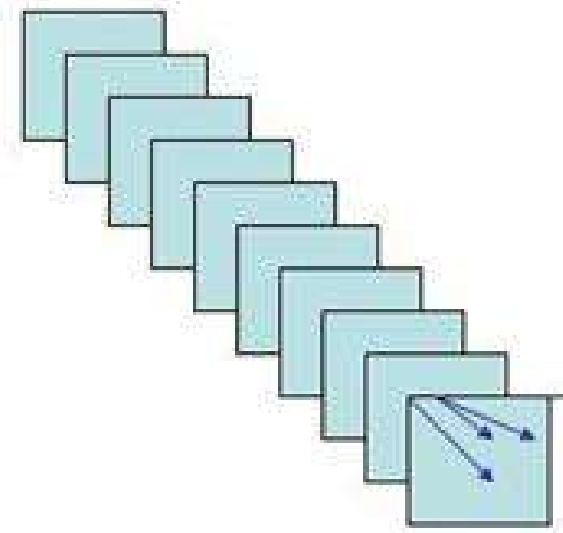


Image-clé



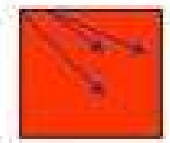
Vidéo2



Vecteurs de Mouvements



Effet final



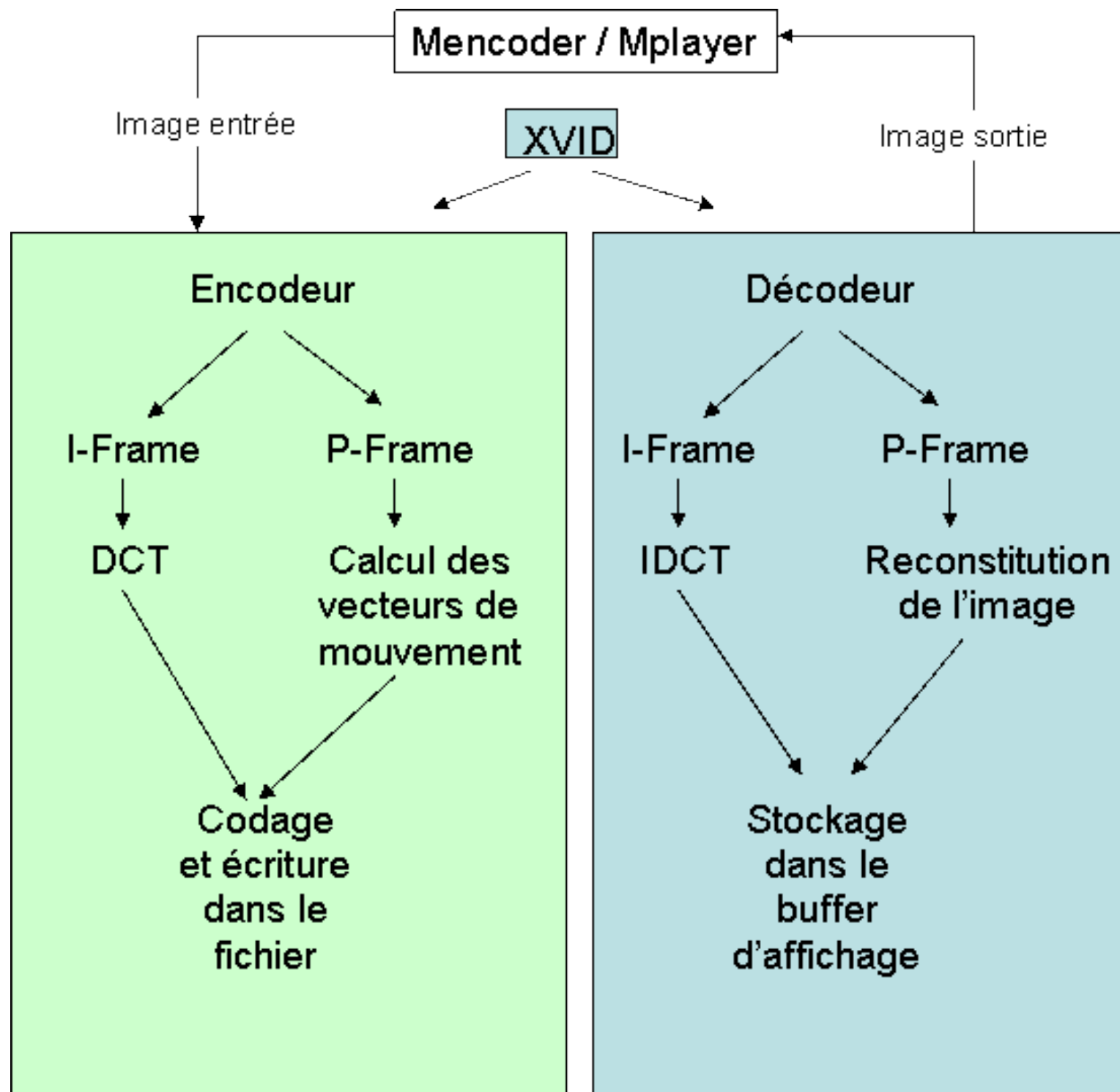


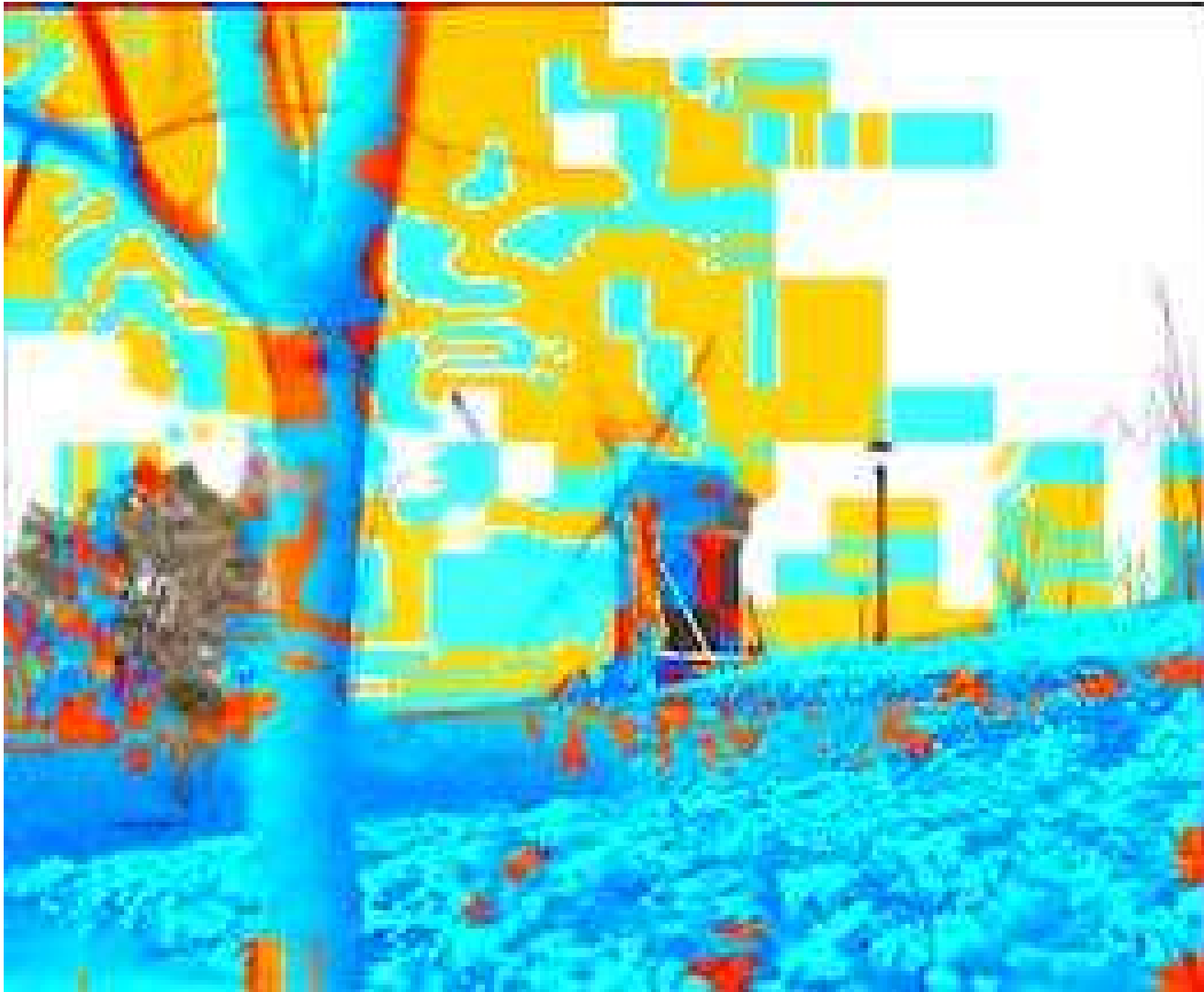
image d'origine



traînée



# coloration



# négatif UV



image d'origine



rotation d'angle  $30^\circ$



rotation d'angle  $45^\circ$



# homothétie



fond / personnage



Georges Seurat 1895





# substitution d'image clef





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  - étudier
  - copier
  - modifier
  - redistribuer
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