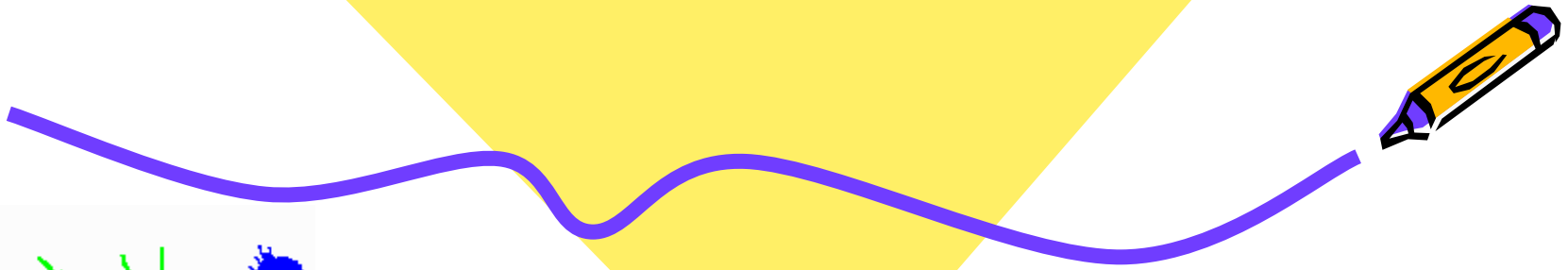
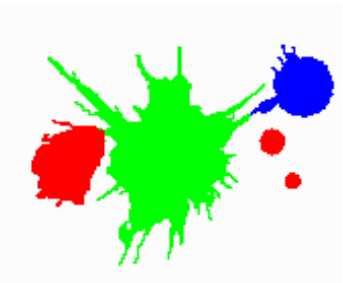
Sisteme software de prelucrarea imaginilor

Selectii





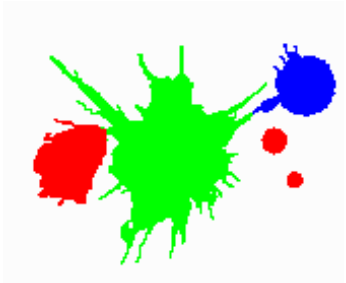
Sisteme Software de Prelucrarea Imaginilor
S.l. Dr. ing. Laura Florea
LAPI



Selectii

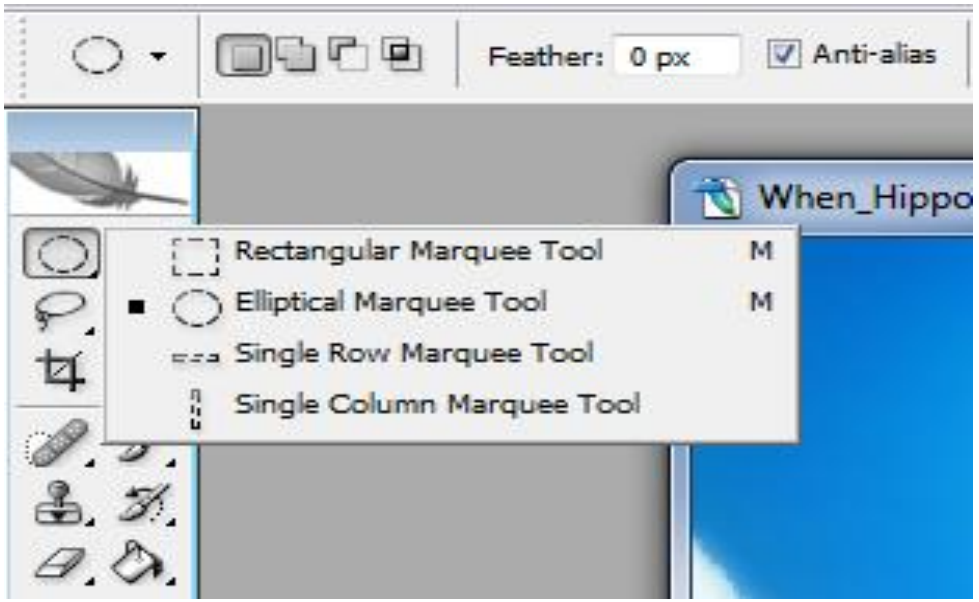


- Selectiile pot fi:
  - In forme geometrice clasice
  - Trase cu mana libera
  - Bazate pe contur
  - Bazate pe culoare



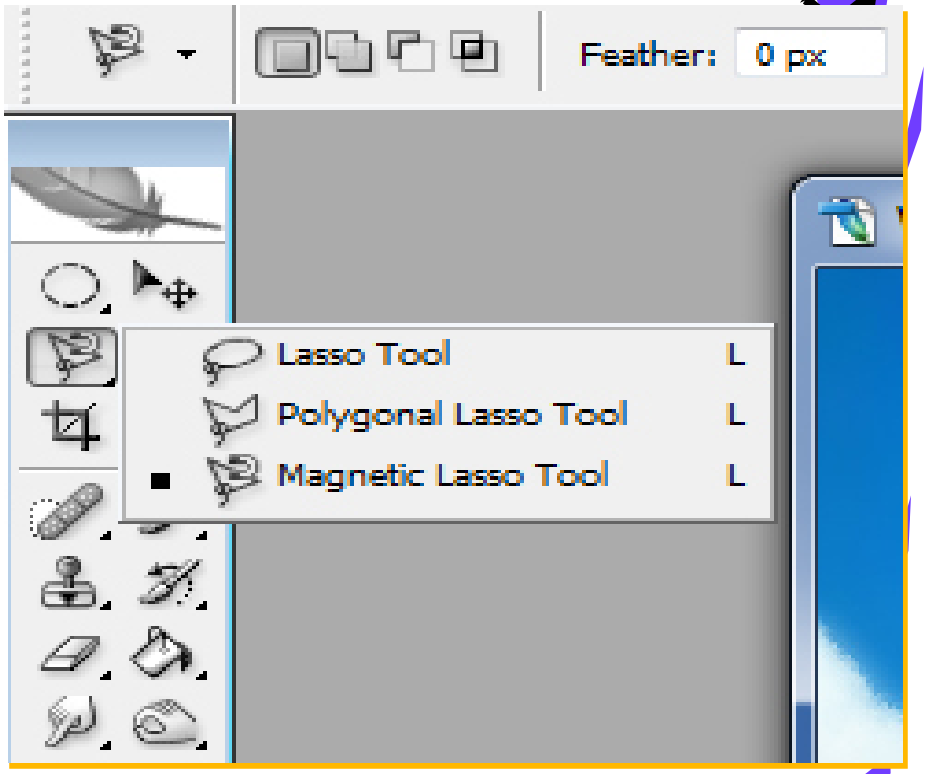
Clasificare

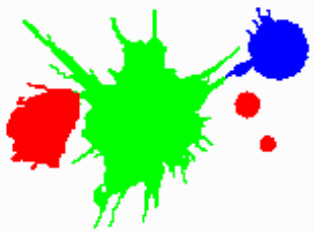
- **Selectii geometrice**
  - Rectangulare
  - Eliptice
  - Un singur rand
  - O singura coloana



Clasificare

- **Selectii '*freehand*"**
  - Lasou
  - Lasou poligonal
  - Lasou magnetic
- **Selectii pe baza de contur**
  - Lasou magnetic
- **Selectii pe baza de culoare**
  - Magic Wand



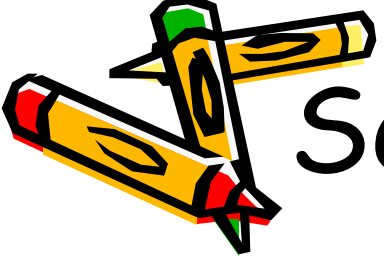


Selectii rectangulare si eliptice

- Punctul de inceput al selectiei este un colt al dreptunghiului (de incadrare).
- Selectia se considera finalizata cand butonul mouse-ului nu mai este apasat.

- Se pot seta manual din optiunile instrumentului:
  - Raportul de aspect
  - Dimensiunea fixa

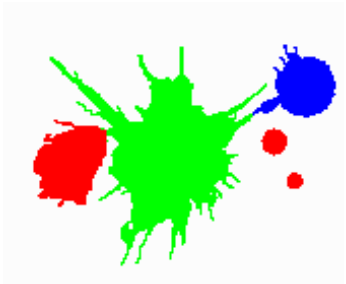




Selectii rectangulare si eliptice



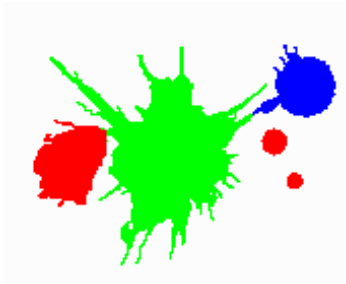
- *Alt* apasat + tras cu mouse-ul = punctul de inceput al selectiei este centrul formei (daca este singura selectie din imagine)
- *Shift* apasat + tras cu mouse-ul = obliga forma selectiei sa fie patrat/cerc (daca este singura selectie din imagine)
- *Spacebar* + tras cu mouse-ul = muta selectia in timpul selectarii
- *Shift, Alt, Spacebar* se pot folosi si simultan



Selectii '*freehand*"

- *Lasou*: face selectia cu mana libera urmarind mouse-ul
- Selectia se considera finalizata cand butonul mouse-ului nu mai este apasat.

- *Lasou poligonal*: face selectie poligonala prin unirea punctelor selectate de utilizator
- *Dublu-click* finalizeaza selectia (uneste primul si ultimul punct)



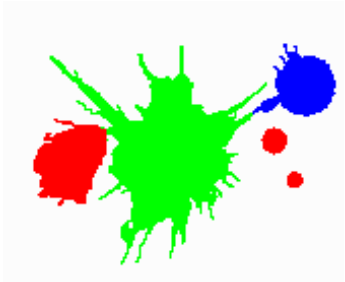


Selectii '*freehand*"



- *Alt* apasat + *lasou* = transforma *lasoul* in *lasou poligonal* cat timp este tasta *Alt* apasata
- *Alt* apasat + *lasou poligonal* = transforma *lasoul poligonal* in *lasou* cat timp este tasta *Alt* apasata
- *Lasou* + *Delete* apasat = sterge din selectie
- *Lasou poligonal* + *Delete* apasat = sterge ultimul segment

- *Shift* + *lasou poligonal* = obliga segmentele sa fie la unghiuri din 45 in 45 grade (0, 45, 90, 135, 180…)



Selectii pe baza de contur (*Magnetic Lasso*)

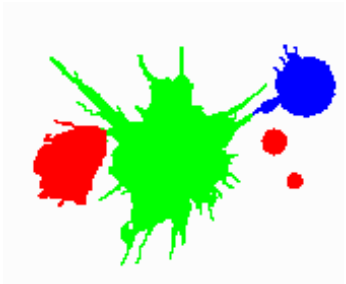


- Urmareste mouse-ul si face selectia pe baza contururilor celor mai puternice din zona mouse-ului

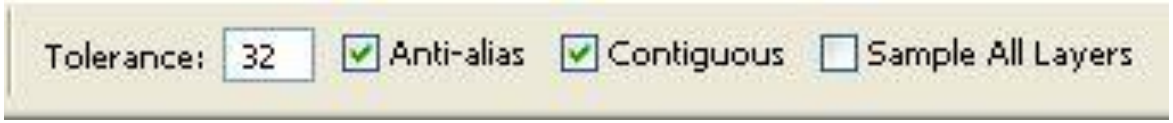
- *Width*: cat de departe cauta contur in jurul mouse-ului
- *Edge Contrast*: cat de puternic trebuie sa fie conturul (cat de mare trebuie sa fie diferenta de culoare)
- *Frequency*: cat de dese sa puna punctele pe contur

Selectii pe baza de contur (*Magnetic Lasso*)

- *Backspace* sau *delete* sterg ultimele puncte adaugate
- *Lasou magnetic* + *Alt* apasat = schimba in *lasou*
- *Lasou magnetic* + *Alt* apasat + Click = schimba in *lasou poligonal*

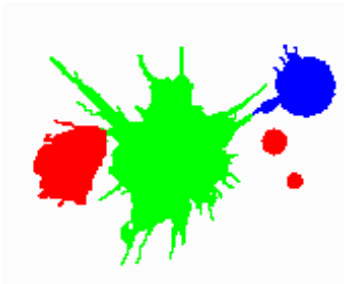


Selectii pe baza de culoare (*Magic Wand*)



- Selecteaza toate punctele cu o culoare apropiata de punctul selectat de utilizator

- *Tolerance*: cat de apropiata sa fie culoarea (0-255)
- *Contiguous*: numai puncte adiacente punctului selectat. Daca optiunea nu e selectata se selecteaza toate punctele din imagine care au culoare apropiata cu cel dat
- *Sample All Layers*: considera toate layerele vizibile

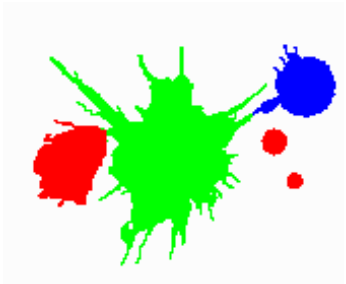




Selectii



- Pentru o selectie data (finalizata):
  - Tras cu mouse-ul muta selectia (fara a modifica imaginea)
  - Orice sageata muta selectia in directia respectiva cu 1 pixel
  - *Shift* apasat + sageata muta selectia cu 10 pixeli
  - *Ctrl+h* sau *View->Extras* sau *View->Show->Selection Edges*: ascunde/arata marginile selectiei



Selectii



- Selectie noua / Adauga la selectia deja existenta (*Shift* apasat)/ Scade din selectia deja existenta (*Alt* apasat)/ Intersecteaza cu selectia deja existenta (*Shift+Alt* apasate)

- *Feather*: cat de 'dure'/blurate sa fie marginile selectiei

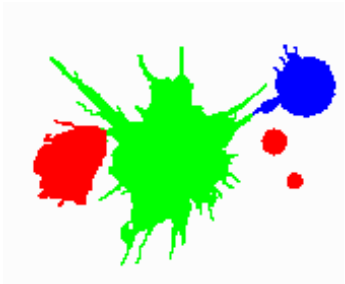
Feather



Feather = 0



Feather = 12



Unealta *Move*

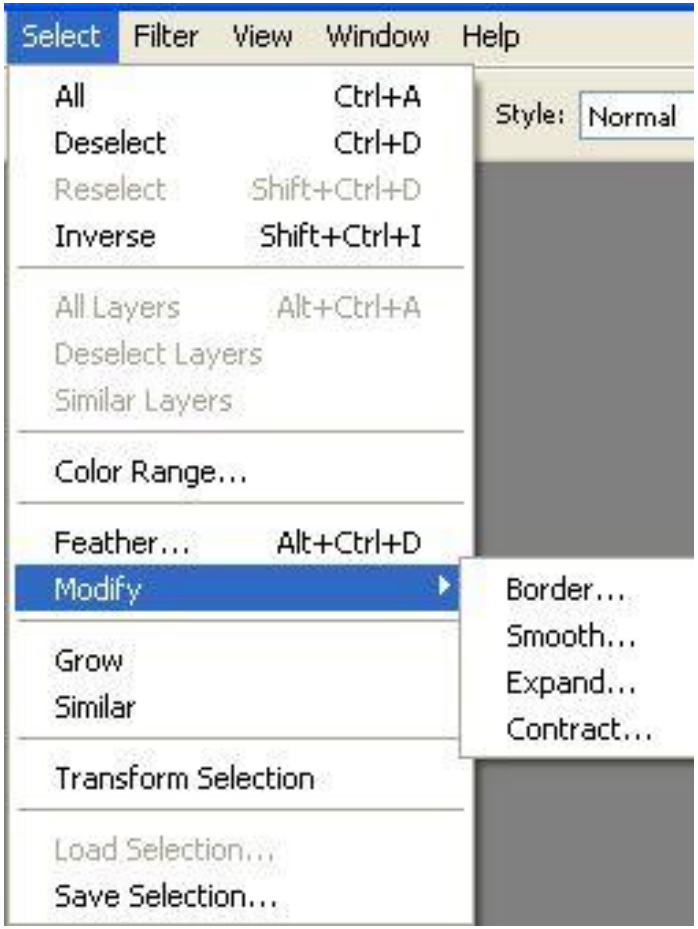


- Muta zona selectata
- *Alt* apasat = muta o copie a zonei selectate





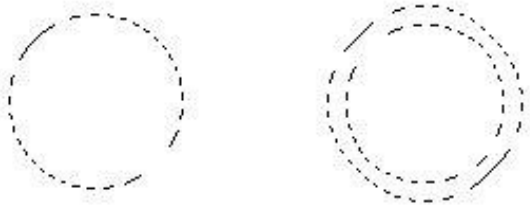
Meniul *Select*



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Select -> Modify

- *Border*: selecteaza numai zona de granita a selectiei deja existente (cu o latime aleasa de utilizator)



- *Smooth*: netezeste granita selectiei

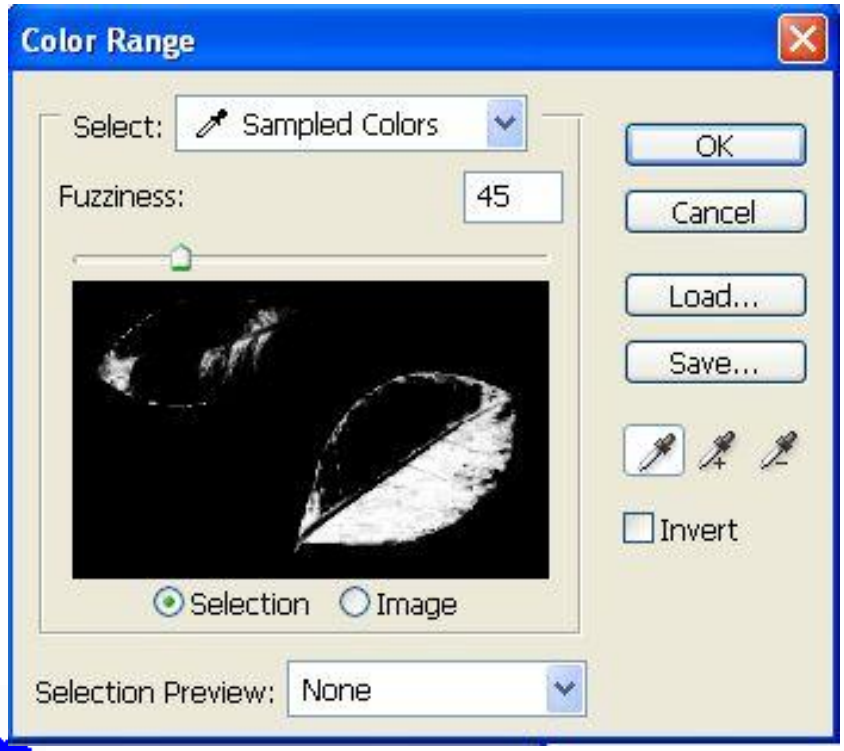


- *Expand*: mareste selectia (dilatare morfologica)
- *Contract*: micsoreaza selectia (erodare morfologica)



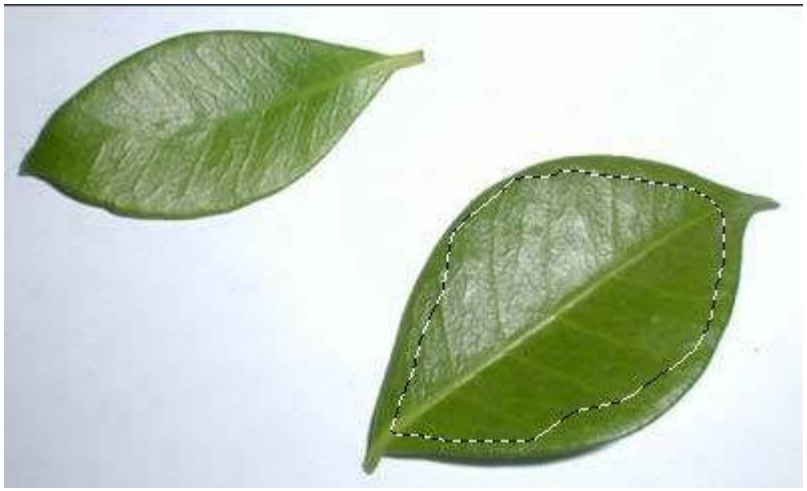
Select->Color Range

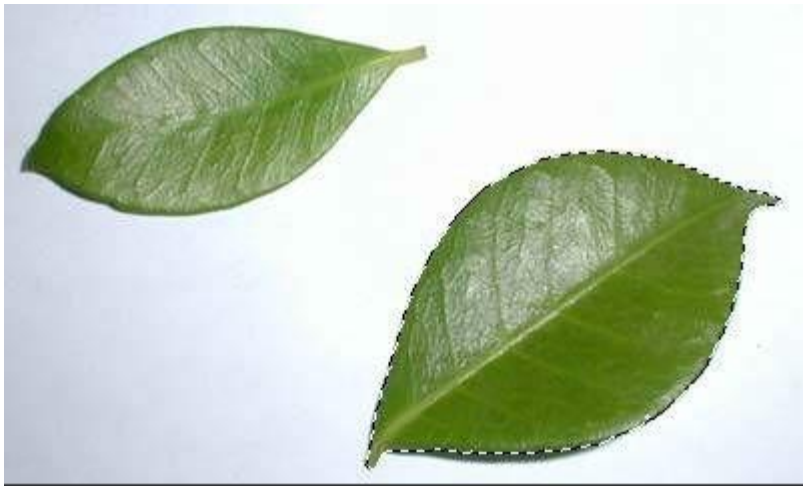
- Selecteaza dupa culoare

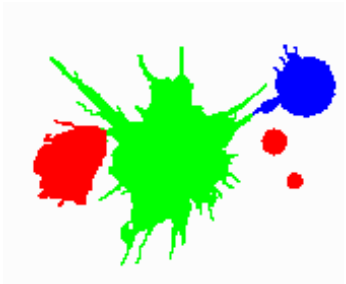


Selection -> Grow

- Include zone adiacente selectiei care au culori asemanatoare cu cele selectate

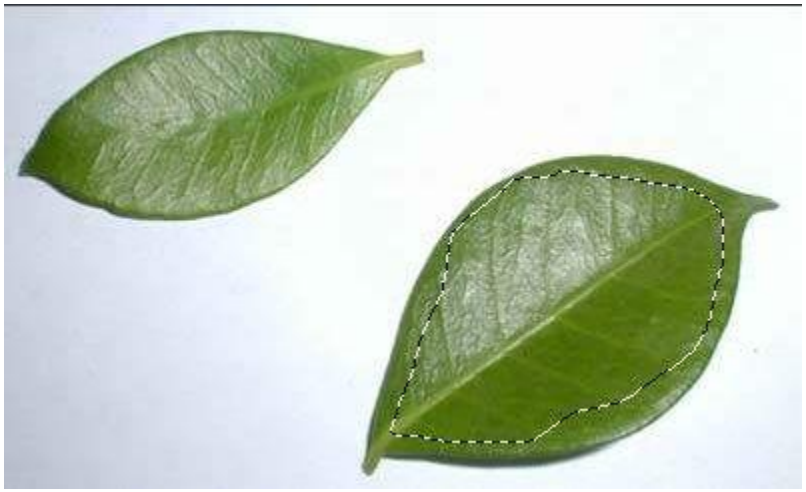


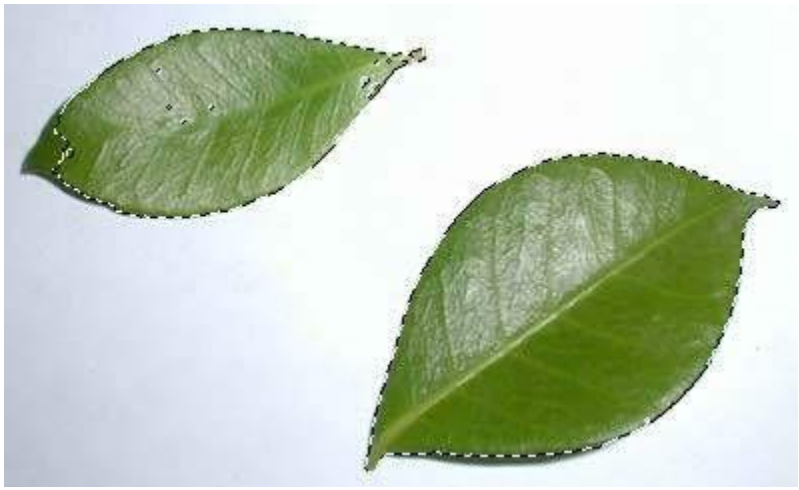


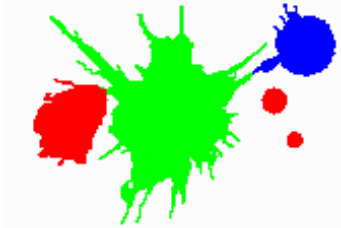


Selection -> Similar

- Include zone adiacente si neadiacente selectiei care au culori asemanatoare cu cele selectate



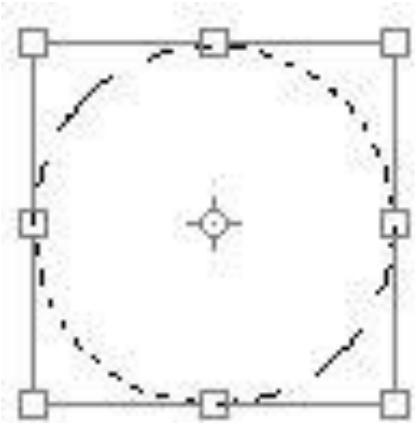


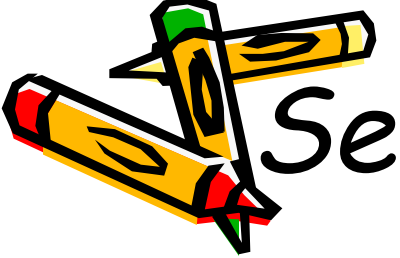


Selection -> Transform Selection

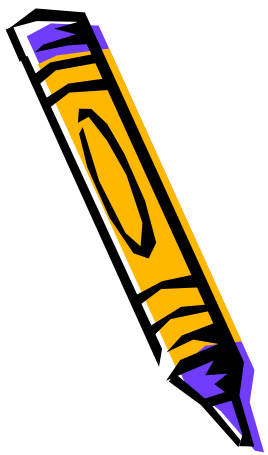


- Permite transformari geometrice ale selectiei prin modificarea dreptughiului de incadrare al acesteia

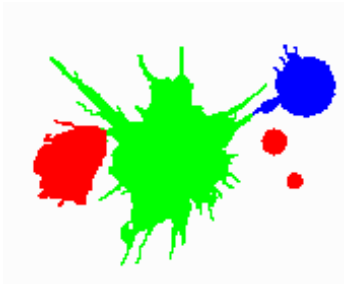




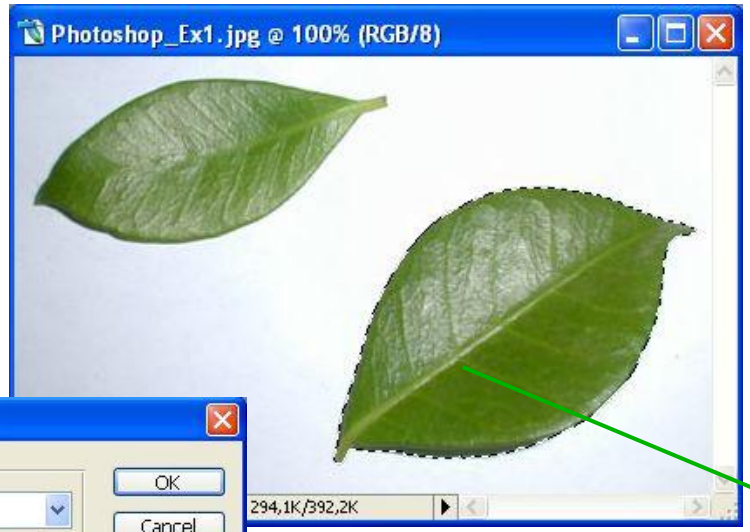
Selection -> Transform Selection

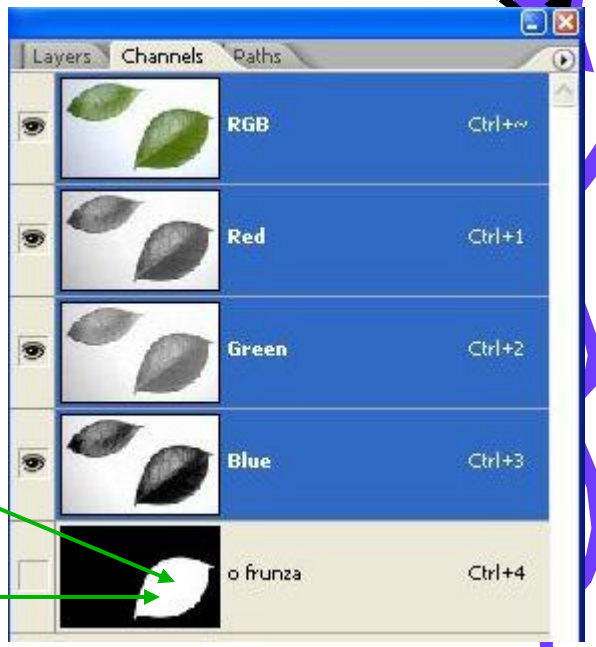


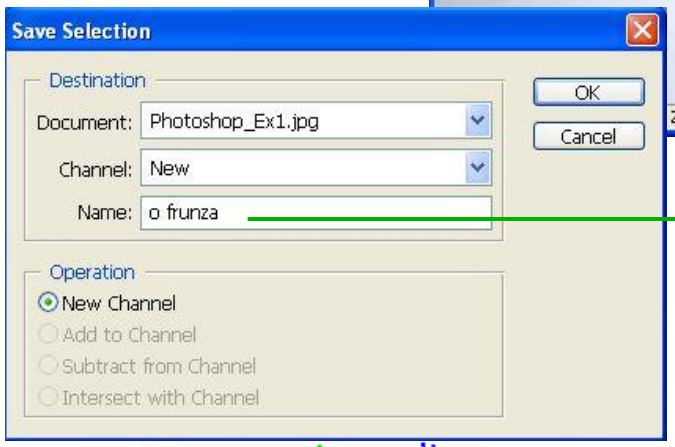
- *Ctrl* + tragerea unui punct de mijloc = inclina selectia (*skew*).
- *Ctrl* + tragerea unui punct de colt = *distorsioneaza* colturile independent.
- *Alt* + tragerea unui punct de colt = redimensioneaza pastrand centrul.
- *Alt* + tragerea unui punct de mijloc= aplica transformarea in ambele parti in oglinda.
- *Shift* = limiteaza transformarile (pastreaza raportul de aspect).
- Pentru rotatii se pune cursorul in afara dreptunghiului de incadrare (se transforma intr-o sageata curba cu cap dublu) si se trage.
- Pentru oglindire se tage unul dintre puncte in directia dorita pana in cealalta parte a formei.
- *Dublu-click* in interiorul dreptunghiului de incadrare sau enter = accepta transformarea.
- *Esc* = renunta la transformare.
- Punctele se mai numesc *handle points*

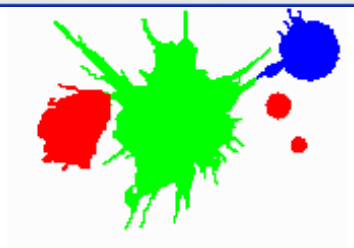


Selection -> Load/Save Selection







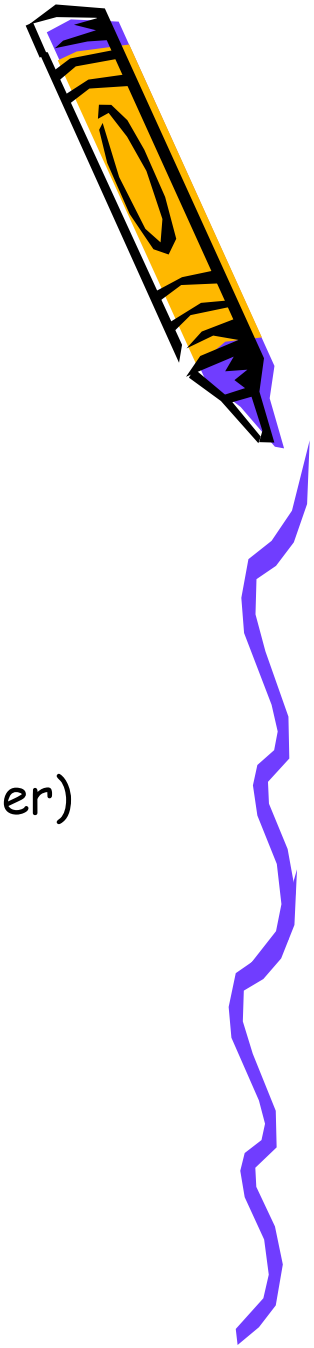


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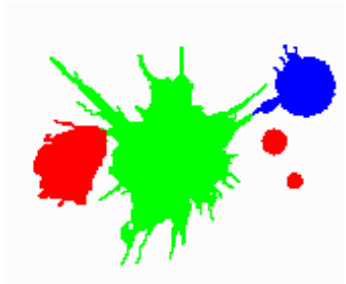
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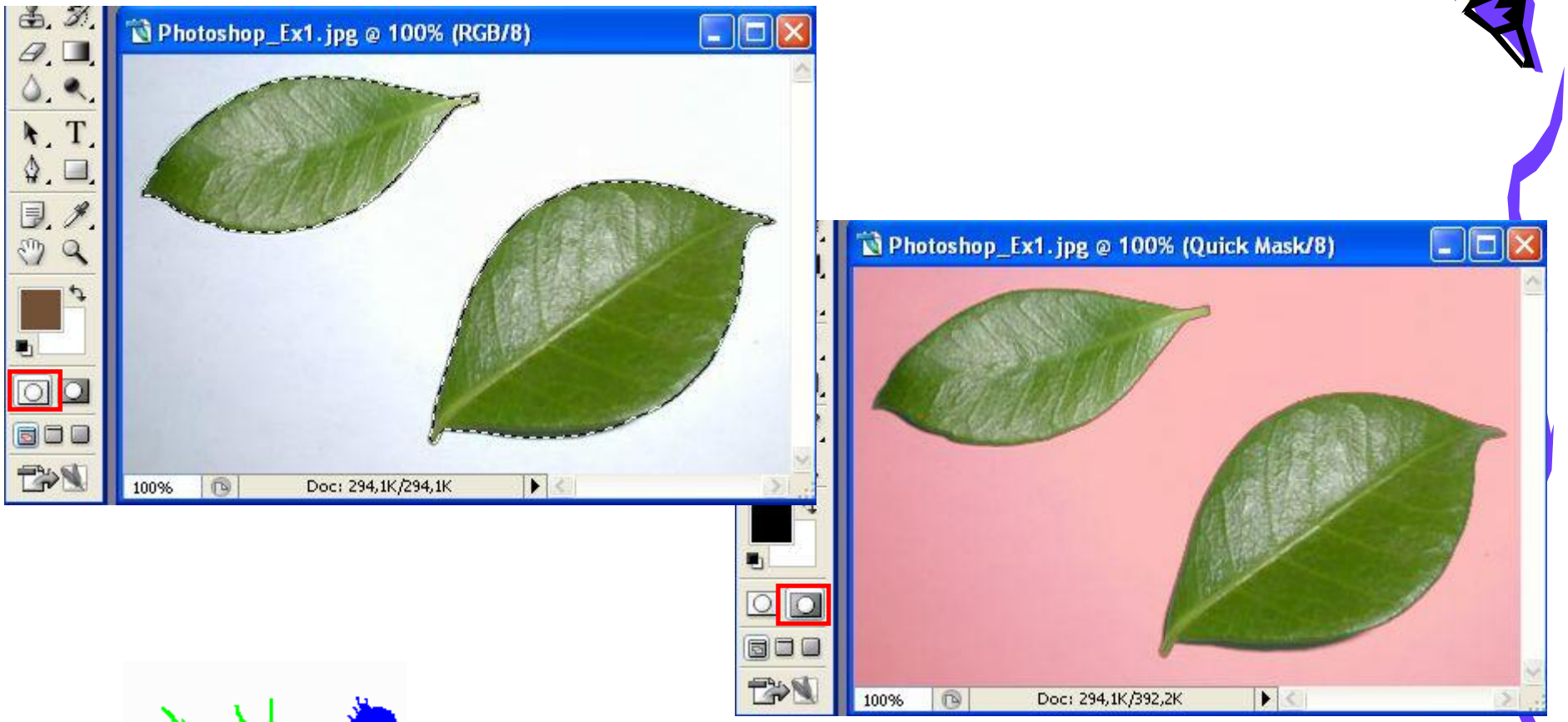
Canale *alpha*



- Canale in care se pot salva forme de selectie
- Au numai niveluri de gri:
  - Negru = pixel deselectat
  - Alb = pixel selectat
  - Gri = pixel selectat partial (cum sunt cei dati de feather)



Quick Mask Mode

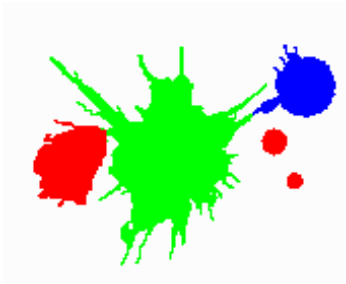


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Quick Mask Mode

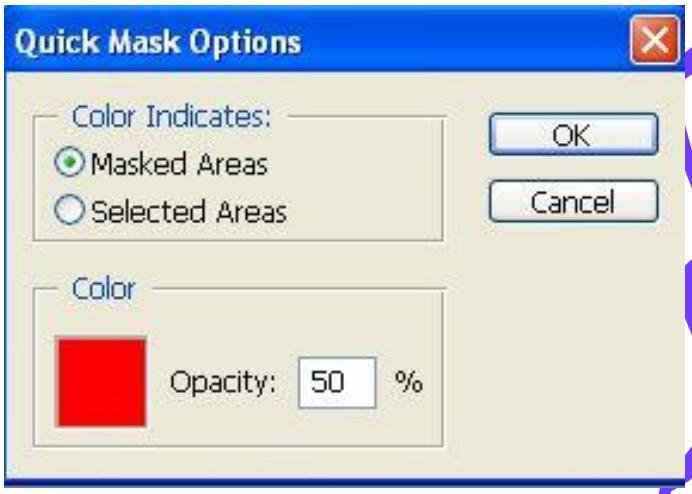
- In modul Quick Mask se lucreaza cu unelte de desen: pensula, guma de sters (etc)

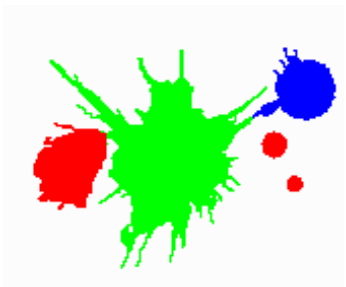
- Zona desenata cu negru va deveni zona neselectata si e marcata pe imagine cu nuanta de rosu suprapusa peste imaginea initiala
- Zona desenata cu alb va deveni zona selectata si ramane vizibila complet in imagine (masca e transparenta)
- Zona desenata cu gri este cu atat mai selectata cu cat griul se apropie de alb



Quick Mask Mode

- *Dublu-click* pe Quick Mask in trusa de instrumente -> meniul de optiuni
- Se poate schimba semnificatia culorilor
  - Pt *Selected Areas*
    - negru = zona selectata
    - alb = zona neselectata
- Se poate schimba culoarea mastii (pentru o mai buna vizualizare)

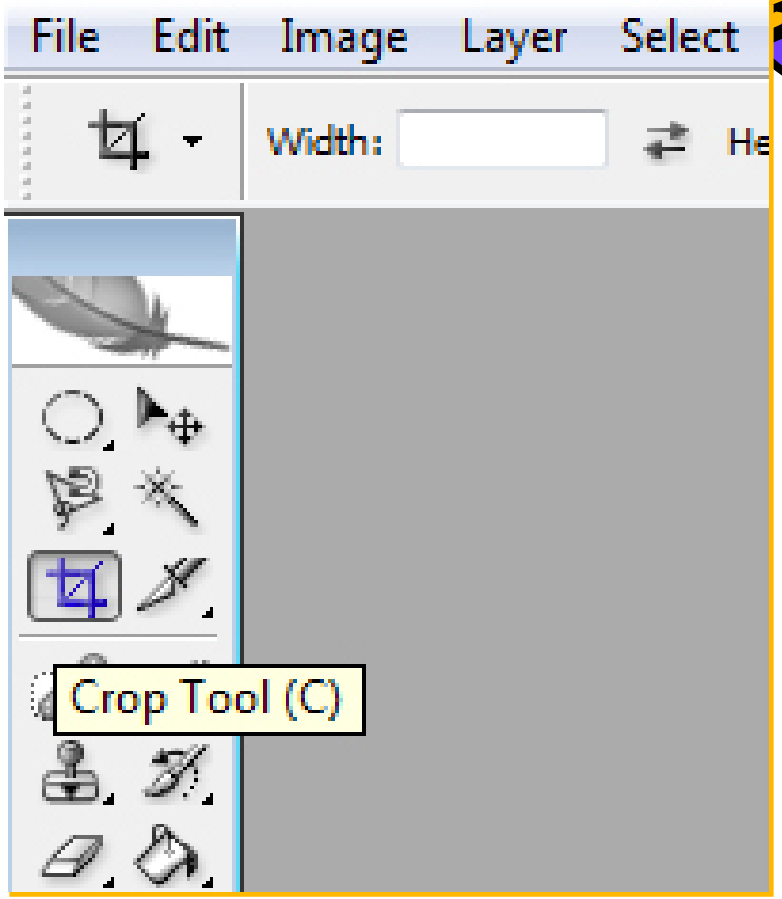




Unealta "*Crop*"

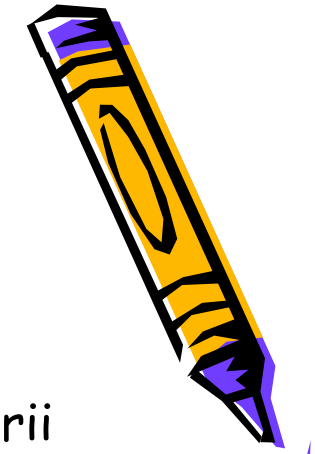
- "Crop" = taierea pixelilor de pe marginile imaginii (primele si ultimele linii si coloane); taie o bucata din imagine

- Permite si rotatia simultana a zonei taiate (ceea ce presupune si remaparea pixelilor pe noile coordonate)



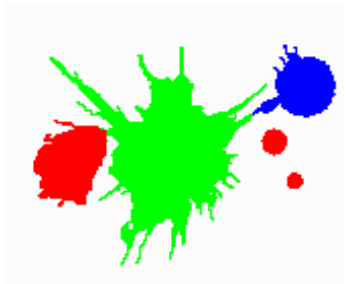


Crop



- *Spacebar* + tras cu mouse-ul = muta zona in timpul selectarii

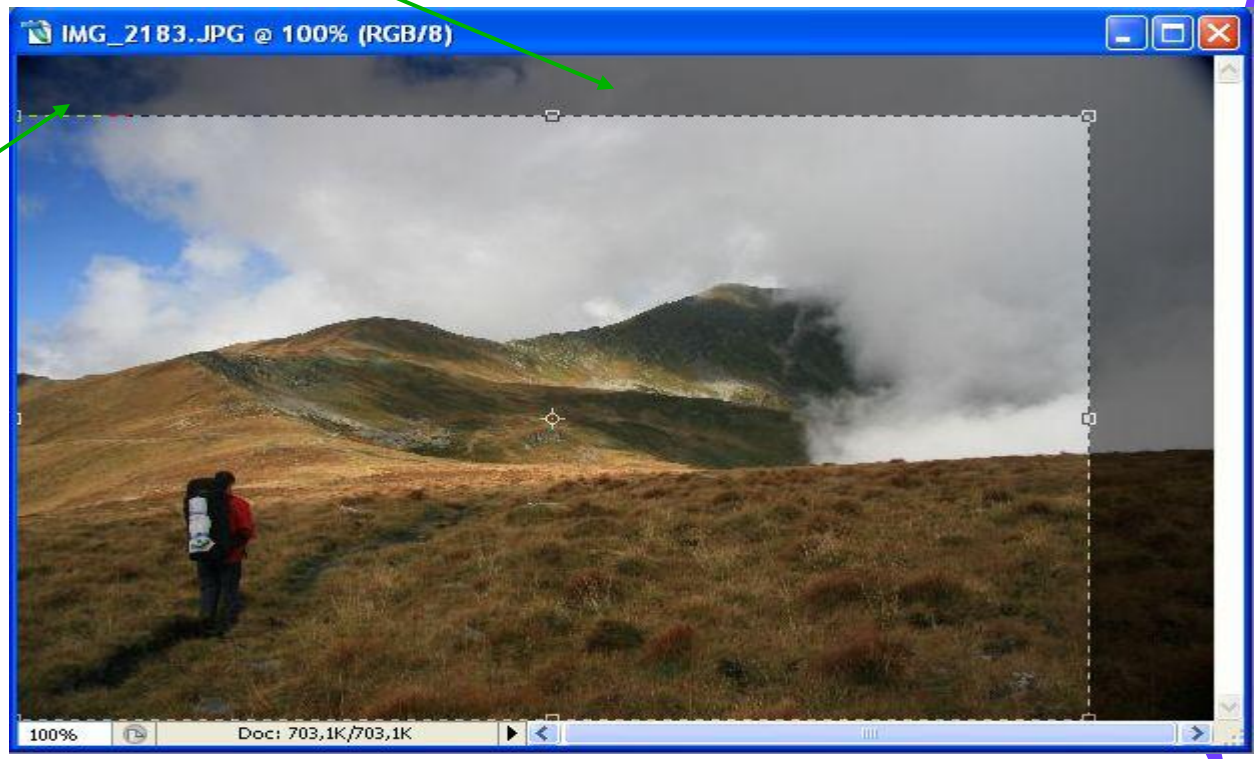
- Dupa ce se selecteaza o zona:
  - *Click* in interior si tras cu mouse-ul = misca zona
  - *Click* in afara si tras cu mouse-ul = roteste zona
  - *Click* pe unul din punctele *'handle'* = redimensioneaza zona

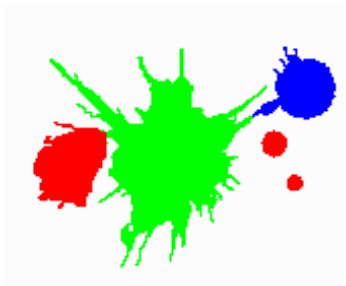


Crop



Zona ce
va fi taiata

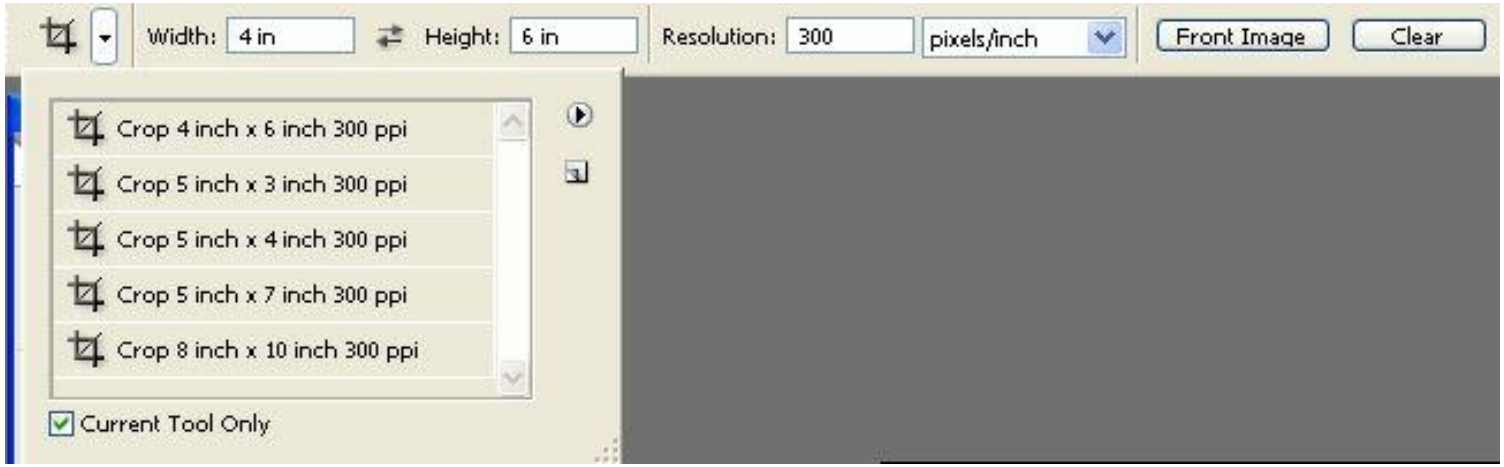




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Crop

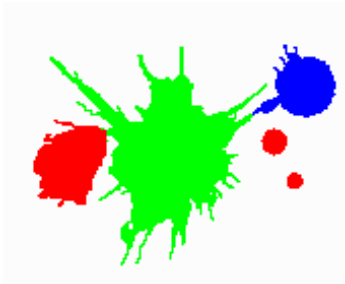


- Se poate seta dimensiunea si rezolutia imaginii rezultante
- Exista si variante presetate
- Se poate salva varianta actuala ca varianta presetata
- *Front image* = incarca dimensiunile imaginii selectate

Crop







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Crop

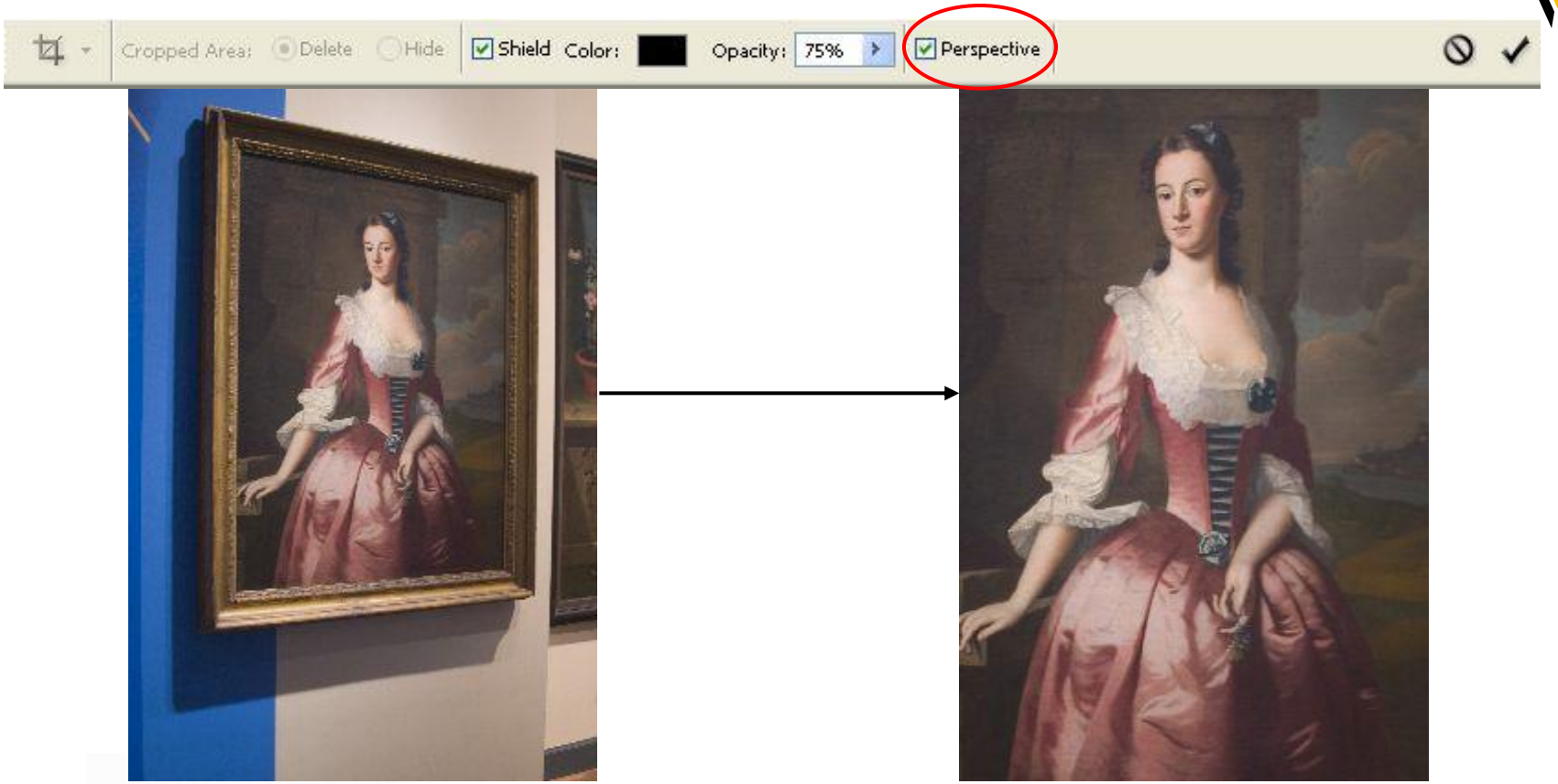

Cropped Area:
Delete
Hide
Shield
Color:
Opacity:
75%
Perspective



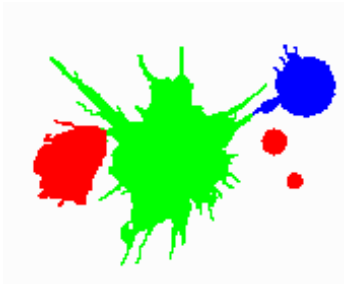
Image -> Crop







- Avantaj: *undo*

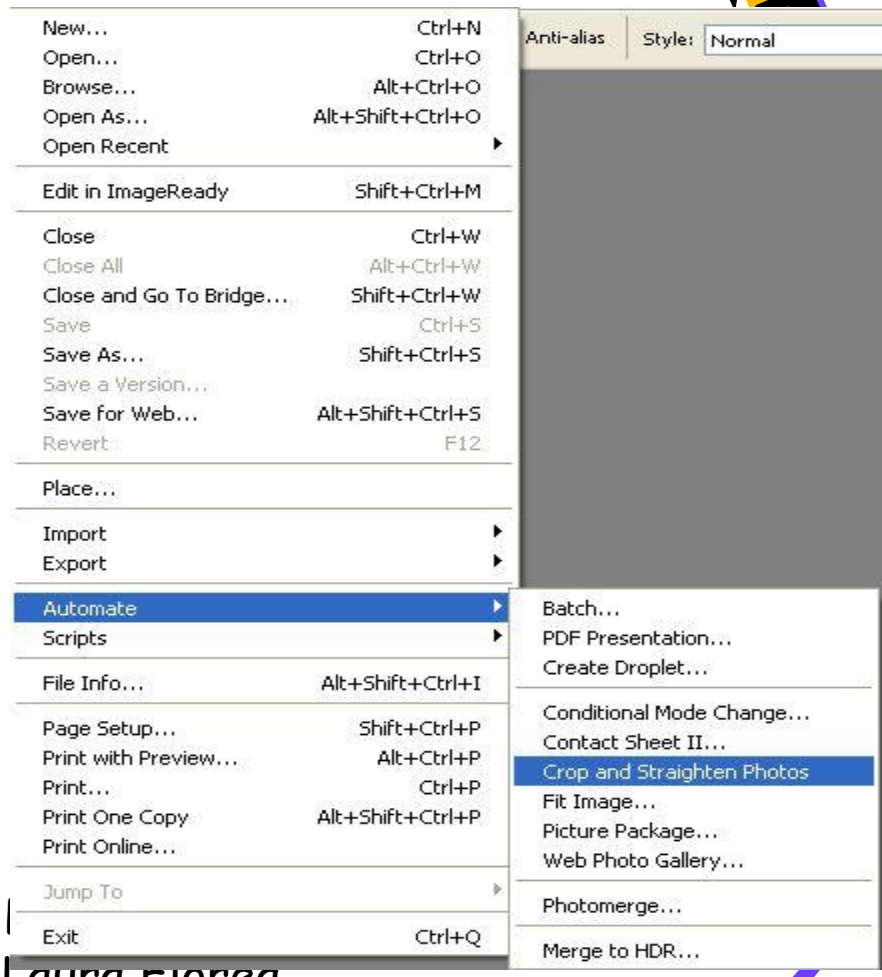


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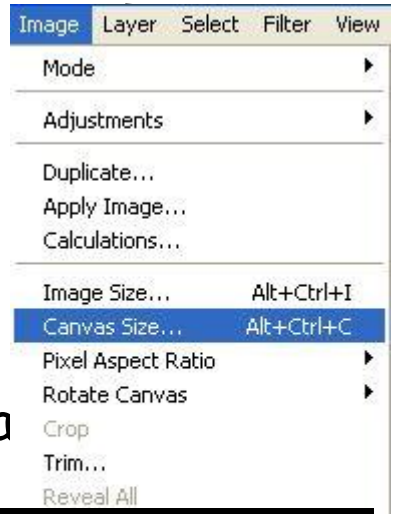
File->Automate-> Crop and Straighten Photos

- Indreapta si face crop automat pentru imaginile scanate
- Merge numai cand culoarea de background este diferita de cele de la marginile fotografiilor
- Imaginile rezultante sunt redenumite



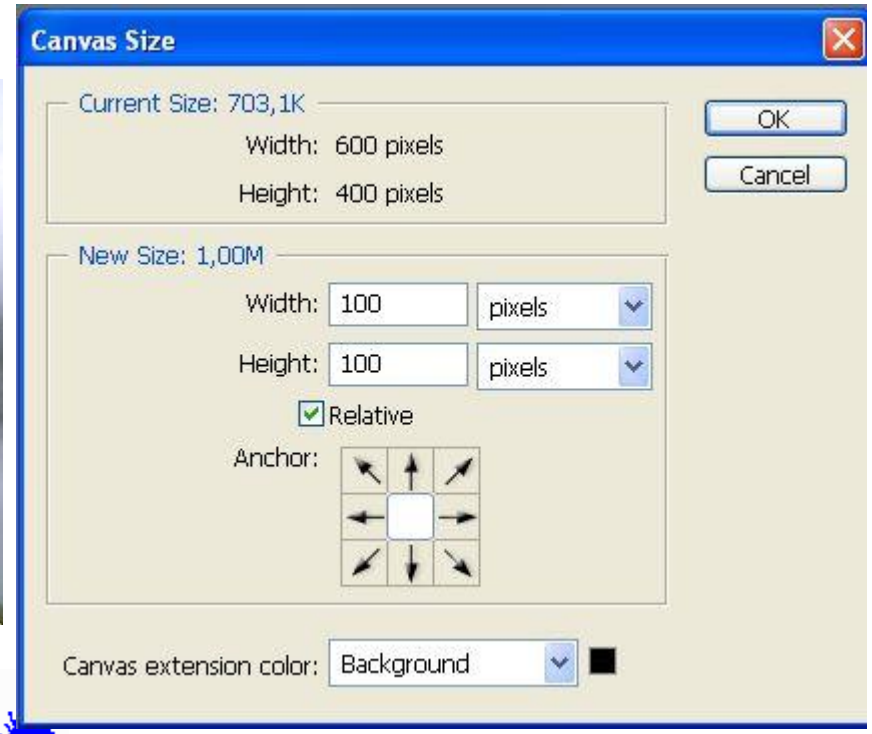
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Image->Canvas Size

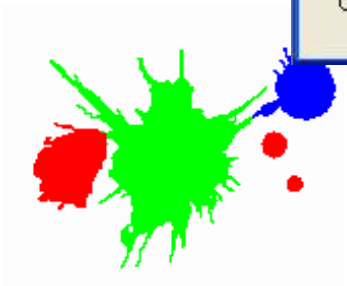


- Dimensiunea 'hartiei' pe care este desenata imaginea







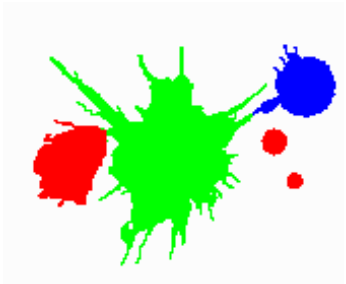


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Image->Canvas Size

- Pentru dimensiunea finala se poate lua si dimensiunea unei a doua imagini (atat relativa cat si absoluta)
- Dimensiunea hartiei poate fi mai mare sau mai mica decat cea a imaginii
- Daca dimensiunea hartiei e mai mica decat cea a imaginii se face Crop



Bibliografie

- www.lynda.com
- http://graphicssoft.about.com
- Adobe Photoshop - Classroom in a Book, Adobe Press

