

The FIM (Fbi IMproved) Universal Image Viewer, in a Nutshell

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Before FIM



young hare
Albrecht Dürer, 1502 (Wikipedia)

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- ▶ *but* I wanted VIM's `h` `j` `k` `l` keys...

... and then more ...

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Wolpertinger

Rainer Zenz's edits on Albrecht Dürer's
"young hare" (Wikipedia)

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- ▶ ...



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FIM: *Fbi IM*proved: a Unix tool

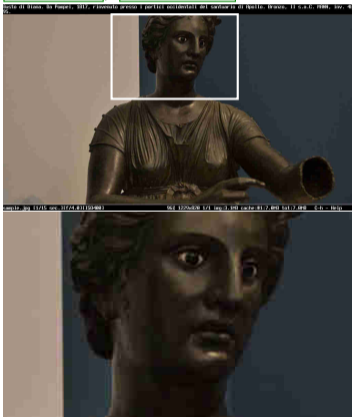
-  show images
 - minimal user interface
 - >_ command line interface (CLI)
 -  with configuration file
 -  read from converter programs
 -  highly interoperable



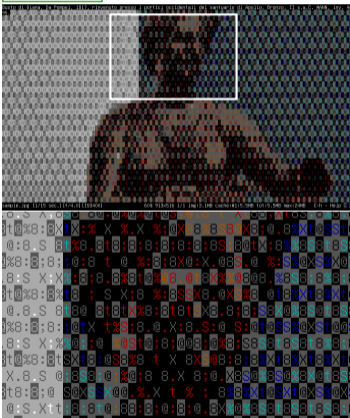
One binary, several graphical modes

- ▶ uniform *look and feel*

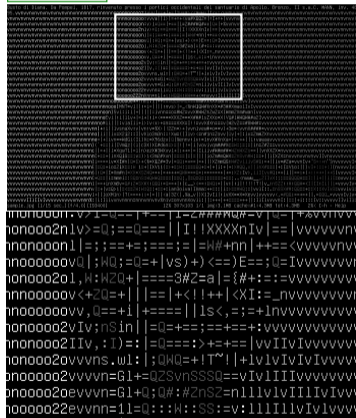
`-o fb` / `-o sdl`



`-o ca`



`-o aa`



keys are assigned to language elements 

- ▶ `+` magnify
- ▶ `-` reduce '20%'
- ▶ `Del` list 'pop';reload
- ▶ `PageDown` if(_display_console==0){next;}else{scd;}
- ▶ ...

commands “reside” in CLI mode

- ▶ enter CLI mode with `:` (like in VIM)
- ▶ `Tab` autocompletion



⇒ `: nex` ⇒



⇒ `Tab` ⇒



- ▶ `:` `-10%` *scale '-10%'* *reduce*
- ▶ `:` `3` *goto 3*

Customizable captions with *expandos* (i.e. *format strings*) ↗



```
_want_wm_caption_status="this is %N %k";
```

```
_caption_over_image_fmt=  
"%?_comment?cmt: %:_comment?";
```

```
_display_status_fmt="scaled to %p%%";
```

```
_info_fmt_str="w:%w h:%h";
```

Search on descriptions

▶ `/forward-search`

▶ `?back-search`



(image from Wikipedia)

Temporarily *shortlist* ▼



```
limit 'category' 'activist'
```



(images: Wikipedia)

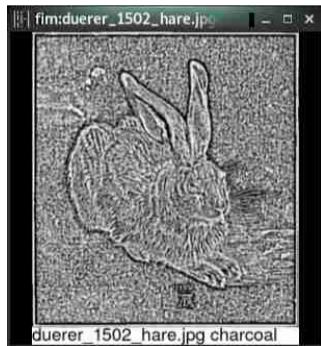
- ▶ metadata (category) stored in a description file

Custom *conversion pipelines*



- ▶ filter each image file data

```
fim --pread-cmd="convert {} -charcoal 5 -pointsize 36 label:'{} charcoal' -append ppm:-" *
```



- ▶ like `find -exec 'cmd {}';'`

Fallback conversion pipelines

- ▶ on selected extensions (**SVG**, ...,DIA, XCF, ...)
- ▶ call external converter (**inkscape**, **convert**, ...)



New: GTK menus

Warning

Work in progress!

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Goals

- ▶ user-customizable via `$HOME/.fimrc`
- ▶ possibly dynamic (`limit 'menuadd' ...`)
- ▶ helpful to access more advanced features

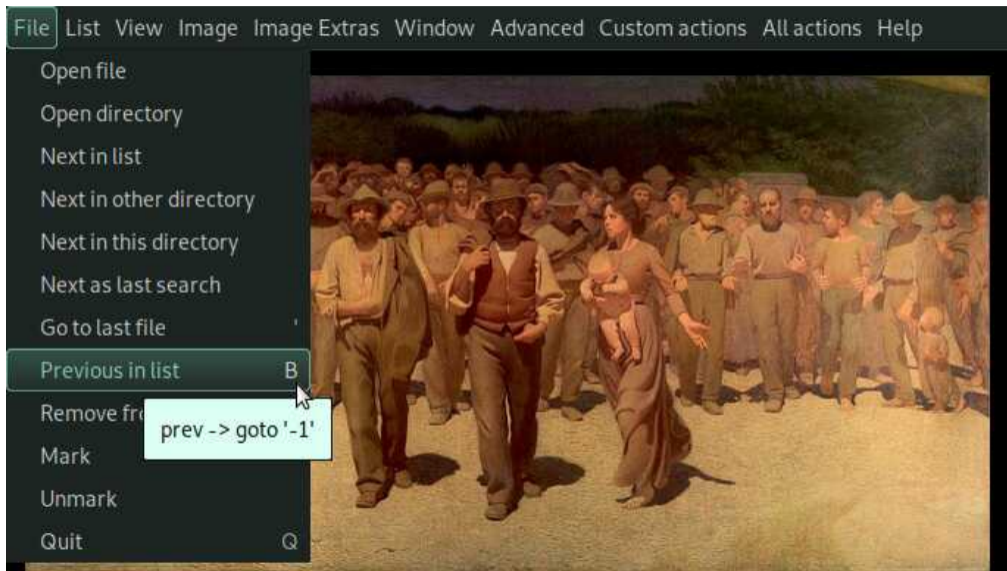
Poor person's menus

File List View Image Image Extras Window Advanced Custom actions All actions Help

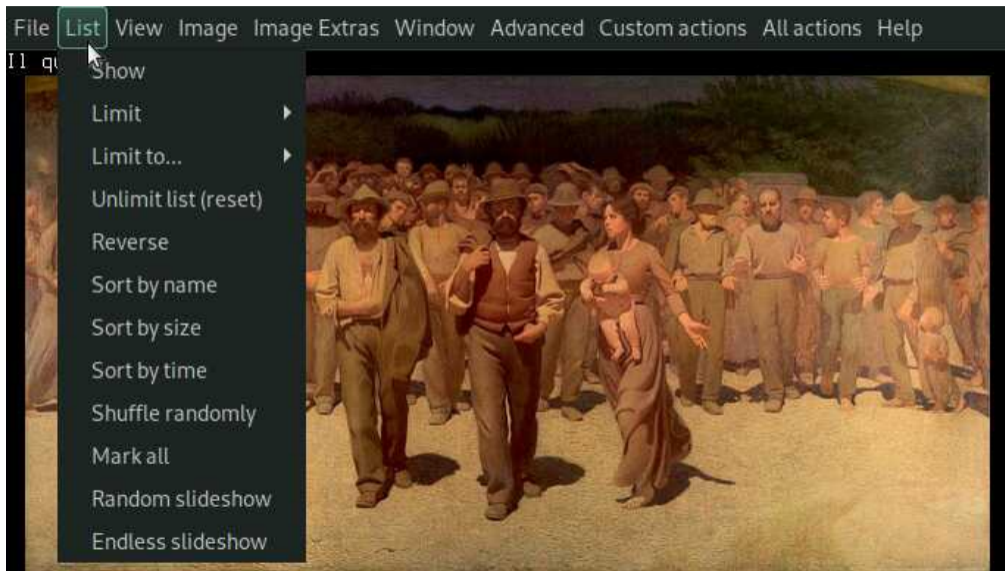
Il quarto stato (1901).



File menu



List menu



List menu: Limit



List menu: in a limited list

File List View Image ImageExtras Window Advanced Custom actions All actions Help
Pieter Bruegel the Elder (1525~1530-1569). "The Wedding Dance", ~1566, Detroit Institute of Arts



List menu: in a limited list

File List View Image ImageExtras Window Advanced Custom actions All actions Help
Pieter Bruegel the Elder (1525~1530-1569), "The Land of the Cockaigne", 1567, Alte P
inakotheek, Munich



Image menu: Flip and `i:flipped`



Image menu: after Flip

File List View Image ImageExtras Window Advanced Custom actions All actions Help

Pieter Bruegel the Elder (1525~1530-1569). "The Land of the Cockaigne", 1567, Alte Pinakothek, Munich



Image menu: after Flip



Image menu: toggle menus synchronization



View menu and `_autoflip`

The screenshot displays the Universal Image Viewer (FIM) interface. The top menu bar includes: File, List, View, Image, Image Extras, Window, Advanced, Custom actions, All actions, and Help. The 'View' menu is open, showing the following options:

- Automirror
- Autoflip
- Scale: auto
- Scale: by height
- Scale: by width
- Scale: by height
- Orientation: normal
- Orientation: 90' right
- Orientation: upside down
- Orientation: 90' left
- Desaturate
- Autonegate

A mouse cursor is hovering over the 'Autoflip' option. A small tooltip box is visible next to it, containing the text:

```
_autoflip=1  
_autoflip=0
```

The background of the viewer shows a painting of a woman in a red dress lying on the ground, surrounded by various objects and figures. The text at the top of the image area reads: "-1569), 'The Land of the Cockaigne', 1567, Alte P".

View menu and Orientation radio button

File List **View** Image ImageExtras Window Advanced Custom actions All actions Help

Pieter Br
inakothe

- Automirror
- Autoflip
- Scale: auto
- Scale: by hand (manual)
- Scale: by width
- Scale: by height
- Orientation: normal
- Orientation: 90'right
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-1569). "The Land of the Cockaigne", 1567, Alte P



View menu and Orientation changed after Flip

File List View Image ImageExtras Window Advanced Custom actions All actions Help

Pieter Bruegel the Elder (1525~1530-1569), "The Land of the Cockaigne", 1567, Alte Pinakothek, Munich



View menu and Orientation changed after Flip

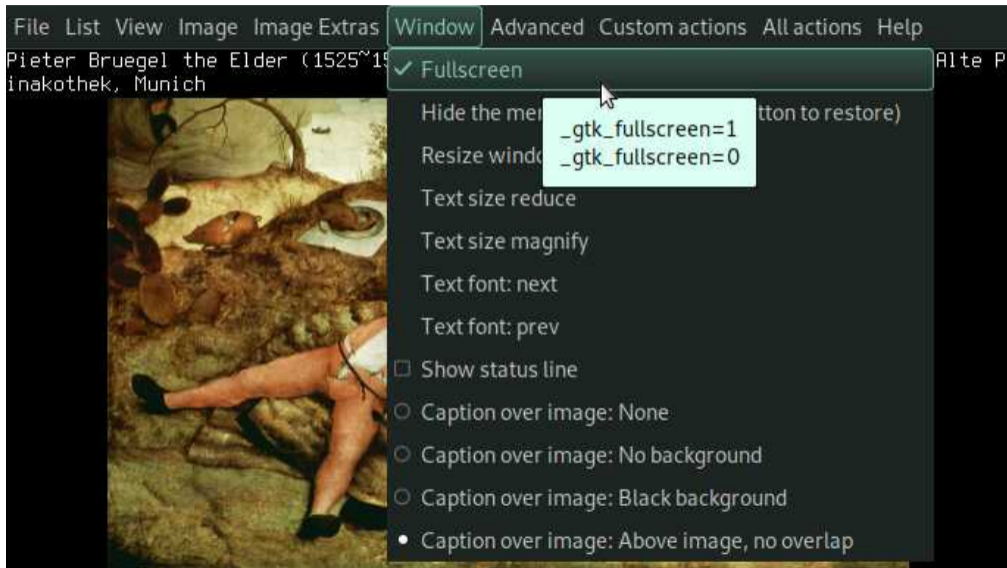
File List **View** Image Image Extras Window Advanced Custom actions All actions Help

Pieter Brinakotheek -1569). "The Land of the Cockaigne", 1567, Alte P

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Window menu



Advanced menu and alias help expansion in tooltips

File List View Image ImageExtras Window **Advanced** Custom actions All actions Help

Pieter Bruegel the Elder (1525~1530-1569)
inakotheek, Munich

- Show output console (then hide with Tab) T te P
- Verbose keys
- Low execution verbosity
- Intermediate execution verbosity
- High execution verbosity
- Rebuild menus with tooltips
- Background Prefetch

```
_rebuild_verboser_menus -> _debug_commands=_debug_commands."m";display "reinit" "f";
```


Custom menu

File List View Image ImageExtras Window Advanced Custom actions All actions Help

Pieter Bruegel the Elder (1525~1530-1569), "The L...
inakotheek, Munich

Webcam shot (needs vgrabbj)

Say something (need espeak)

- Max cached memory: 256MiB
- unlimited
- very little
- 80MiB

Custom menu and `pread` + `vgrabbj` example

The screenshot shows the Universal Image Viewer interface. The menu bar includes 'File', 'List', 'View', 'Image', 'Image Extras', 'Window', 'Advanced', 'Custom actions', 'All actions', and 'Help'. The 'Custom actions' menu is open, showing a 'Webcam shot (needs vgrabbj)' option. A mouse cursor is hovering over this option. Below the menu, a terminal window displays the command: `webcam -> pread 'vgrabbj -d /dev/video0';$`. A sub-menu is also visible, showing radio button options for memory usage: 'unlimited', 'very little', and '80MiB'. The background image is Pieter Bruegel the Elder's 'The Fight Between Carnival and Lent'.

Special “All” submenus

File List View Image Image Ext

Pieter Bruegel the Elder (152...
inakotheek, Munich

A

- _gtk_check_for_toggle_fullscreen
- _gtk_check_for_toggle_gtk_menus
- _rebuild_verboser_menus
- _rebuild_verbosetest_menus
- aalib_fix
- aalib_fix_do
- bookview
- bottom
- cacalib_fix
- cacalib_fix_do
- center

All actions Help


Commands

Alias

Key Bindings

Variables

Special "Help" submenus



File List View Image Image Extra: actions Help

Pieter Bruegel the Elder (1525~
inakotheek, Munich

font_magnify_auto
font_magnify_manual
font_reduce
font_reduce_auto
font_reduce_manual
idempotent_cmd
left
magnify

Commands
Aliases
Key Bindings
Variables
man FIM
man fimrc

"magnify" is an alias, and was declared as:
alias "magnify" "scale '+' # magnify the displayed image by the _magnify_factor variable
or {args}

Acknowledgements

- ▶ Distro maintainers over the years
- ▶ Especially: Debian's Rafael Laboissiere!!!
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(remember to visit



`https://ilovefs.org/`



End

- ▶ <https://www.nongnu.org/fbi-improved>
- ▶ `apt install fim` Debian & family
 - ▶ see also e.g. NixOS, Gentoo, Arch
- ▶ `man fim` for options
- ▶ `man fimrc` for the language

