Beamer dark Themes

Damien Thiriet
damien.thiriet@uj.edu.pl
May 10, 2020

Contents

1 Installation ............................................ 1
  1.1 TeX distribution package manager .................. 1
  1.2 Manual download .................................. 1

2 Dark themes: what for? ............................... 2

3 Names ............................................... 2

4 Caveats ............................................. 3

5 Examples ............................................ 3

6 History .............................................. 8

1 Installation

1.1 TeX distribution package manager

Just download the package darkbeamertemes with your \TeX{} distribution (\TeX{} Live, MiK\TeX{}, Mac\TeX{}, pro\TeX{}t...). \TeX{} Live users may use the graphical interface or write in a console

\texttt{tlmgr install darkbeamertemes}

An introduction to Mac\TeX{} package manager can be found at \url{http://code.google.com/p/mactlmgr/wiki/GettingStarted}, a more complete documentation should be found in Mac\TeX{} help menu. MiK\TeX{} manual is available online: \url{http://www.miktex.org/help}. As far as I understand, pro\TeX{}t uses MiK\TeX{} package manager.

1.2 Manual download

Sometime you cannot use your \TeX{} distribution packaging tools. You may just do not know what a \TeX{} distribution is; maybe you don’t have rights to use its admin tools; some GNU/linux (and *BSD?) distributions package \TeX{} Live without its administration tools; etc.

Download \texttt{beamercolorthemecormorant.sty}, \texttt{beamercolortheemefrigatebird.sty} and \texttt{beamercolorthememagpie.sty}. Under GNU/Linux, you’d better put them in a subdirectory of \TeX{} Live personal directory, \$\text{HOME}/\text{texmf}$ by defaults (%USERPROFILE%\text{\textbackslash texmf} under Windows). Create the subdirectory \$\text{HOME}/\text{texmf}/\text{tex}/\text{latex}/$ and move those three files there. They will now be found during compilation, whatever directory you are writing from.

An alternative is to download the file you need directly in your presentation file. This is much less convenient if you intend to use these themes in some other presentation, located in
another directory. Do not forget then to copy/symlink those files or to point them using the 
/../ notation.

Then insert the following line in your preamble:

\usecolortheme{cormorant}

Cormorant should be of course replaced by \texttt{frigatebird} or \texttt{magpie}, depending on your
choice. If you chose any global theme, you should mention the theme first, then your color
theme.

\usetheme{Bergen}
\usecolortheme{cormorant}

\section{Dark themes: what for?}

Before choosing any dark theme, you should be aware of its side effects.

Inverse video (bright text on dark background) can be a problem during pre-
sentations in bright environments since only a small percentage of the presentation
area is light up by the beamer. Inverse video is harder to reproduce on printouts
and on transparencies.


On the other hand, several years of hard experience with light backgrounds used in bright
classroom convinced me that a really dark theme might be useful:

- when there is no screen but a not-so-white wall
- when there is a screen, but your classroom is quite sunny (on the other hand, students
would be more likely to fall asleep in a dark classroom...)
- when your presentation includes lots of photos, images, paintings... Art Historians often
use dark background to emphasize the paintings they are about to comment. Paintings
and photos are more visible on a black background than on a white one.

These themes were tested with all beamer themes. In my opinion, mixing them with shad-
owed themes, such as the very popular Warsaw, should be avoided. White shadows do not look
too fancy on black background IMHO. \textit{De gustibus}...

\section{Names}

As requested by Till Tantau in beamer documentation, my color themes are named after birds.

cormorant A black and green theme, the first one I worked with. First named magpie, since
the first black and green bird I could find on the web was an American magpie. Tested
during one year, sadly without asking students for callback. Its items were hardly readable
when projector darkened the output. I decided finally to mix green with white rather
than black.

magpie A black/blue theme. Named after European magpies.

frigatebird A black/red theme. Inspired by frigate bird’s male. Rather for those who do not
associate to closely red with beamer’s alert boxes.
4 Caveats

\alert{} is not easy to combine with dark backgrounds. Red is not that readable on a dark background. Orange is more readable, but the hierarchy between \alert{} and \structure{} is not obvious at all.

Version 0.5 reassigned therefore basic colors: yellow to alert foregrounds and orange to structure foregrounds. I bet people might find yellow/black contrast more important than the orange/black one. Dark red backgrounds are still used for alertblocks however.

5 Examples

Surprisingly, Euclid’s presentation does not include any photography. I designed those themes to end up with describing photos students could hardly see. So let’s take an example of my own, with a picture, last but not least in French: this is the part of the doc that will surely be properly written. Some sentences are too long, though.

Examples are basically issued from an example.tex file with 4 slides designed with as many environments or macros as possible:

- slide 2: frametitle, block, exampleblock, description
- slide 3: framesubtitle, includegraphics
- slide 4: structure, alert

You can browse the whole file example.tex in the package sources.

Examples are displayed on pages 4-8. Figure 1 to 3 display the whole document without any outer nor inner theme. Figure 4 to 12 display slide 2 and 3 with outer themes variations.
Une espèce montagnarde rare

**Dahut** (*rupicapra armoricanis*)

- Nette dissymétrie longitudinale des membres latéraux.

**Précisions**

- **taille** variable selon les observateurs;
- **alimentation** longs jeûnes : on ne l’a jamais vu se nourrir…
- **instinct grégaire** nul ; réputé solitaire.

Figure 1: cormorant color theme

Figure 2: magpie color theme
Le dahut
Précis de zoologie avec traité de chasse

Ethiem Radin
UFR de Biologie
Université du Gévaudan
Rencontres Quinte Essence, MDCCXLVI

Du dahut
Spécificité
Environnement
Traité de chasse

Une espèce montagnarde rare

Dahut (rupicapra armoricanis)
Nette dissymétrie longitudinale des membres latéraux.

Précisions
- taille variable selon les observateurs;
- alimentation longs jeûnes : on ne l’a jamais vu se nourrir…
- instinct grégaire nul : réputé solitaire.

Un document exceptionnel
Gromosław Krótkowidz, Paysage au dahut, huile sur toile, 1887
Cracovie, musée Jan Stanisławski.

Le traité de chasse

▶ Attraper un dahut demande beaucoup d’expérience…
▶ Il faut retourner l’animal.

Figure 3: frigatebird color theme

Figure 4: cormorant color theme, sidebar outer theme

Figure 5: cormorant color theme, infolines outer theme
Une espèce montagnarde rare

Dahut (rupicapra armoricanis)
Nette dissymétrie longitudinale des membres latéraux.

Précisions
- taille variable selon les observateurs;
- alimentation longs jeûnes : on ne l’a jamais vu se nourrir…
- instinct grégaire nul ; réputé solitaire.

Environnement

Un document exceptionnel
Gromosław Krótkowidz, Paysage au dahut, huile sur toile, 1887
Cracovie, musée Jan Stanisławski.

Figure 6: cormorant color theme, tree outer theme

Figure 7: magpie color theme with sidebar outer theme

Figure 8: magpie color theme with infolines outer theme
Une espèce montagnarde rare

Dahut (rupicapra armoricanis)
Nette dissymétrie longitudinale des membres latéraux.

Précisions
- taille variable selon les observateurs;
- alimentation longs jeûnes : on ne l’a jamais vu se nourrir…
- instinct grégaire nul ; réputé solitaire.

Radin (Univ. Gévaudan) MDCCXL VI 2 / 4

Figure 9: magpie color theme with tree outer theme

Figure 10: frigatebird color theme, sidebar outer theme

Figure 11: frigatebird color theme, inlines outer theme
6 History

v. 0.5.1

- fixed a bug when color are reversed (Riccardo Maffei)

v. 0.5

Color changes may be considered as bug fixes. I realized only few colors do render well on a dark background; red and green are not one of them.

- \alert{} switched to previous \structure{} yellow output.
- \structure{} gives now an orange output.
- item color is now using structure.fg color.
- Palettes redesigned in a more consistent way.
- New colors: section in sidebar shaded, subsection in sidebar shaded, section in head/foot shaded, subsection in head/foot shaded.
- local structure was deleted.
- Documentation improvements: links to auxiliary files, new caveats section, switch to Latin Modern Font, history divided in subsections.
- README now lists package files.

v. 0.4.2

- Improvements of frigatebird: brighter description items (the former ones were hardly readable on a black background), alert colour based on purple.
- Typos fixed in documentation, new history section.

This version was not uploaded on CTAN because I lacked time to do it.
v. 0.4.1
First release on CTAN.

- add package version on *sty, *tex files.
- *jpg and example.tex licenced CC-BY.
- Add changelog to README.

v. 0.4

- Rename magpie to cormorant;
- New themes: magpie and frigatebird.
- New files: beamerdarkthemesuserguide.tex, example.tex and their derivative, img_5630.jpg and dahut.jpg.

v. 0.3

- Change main green from green!50!black to green!50!white to avoid unreadable description items on dark rendering.
- New file: makeexample.sh, adapted from beamer package for testing purpose.

v. 0.2

- Cracow theme dropped;
- oneline outertheme dropped;
- Add sidebar colors to beamercolorthememagpie.sty.

v. 0.1

- New colortheme magpie.
- New theme Cracow.
- New outer theme oneline.