

TikzClip: (Re)-humanizing Clip arts

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1 Motivation

Modern presentations live on clip arts. Since mid-90s, quite a lot of human effort has gone into making clip arts more lively, aiming towards more realistic slide designs. TikzPeople [2], a latex package written in TikZ by a cryptographer colleague, includes amazing designs for shapes of people to depict different characters in slides. The design principle follows the immensely popular type of clip arts included in the Microsoft Visio software. TikzPeople got so popular that it now comes bundled with TeXLive.

While preparing for my lectures and research presentations, I wanted to design EDI-aware slides. While exploring different options in TikzPeople, I noticed the following comments in the documentation (under the option female) [1]

The female option is supposed to make stereotypically male nodes look just tad more feminine. For most tikzpeople this is accomplished by adding longer hair and losing the beard - though surprisingly, evil women still tend to have a goatee.

This is useful to avoid being called sexist for not having women in you figures. On the other hand people can now accuse you of enforcing gender stereotypes. So have fun.

These comments, at the very least, prove the limitations of the design principles used in TikzPeople and, perhaps broadly, the design philosophy of the clip arts in the Microsoft Visio software. The main source of the confusion is the fact that the characters are depicted via the *skin colour*, *physical features like hair and beard length and colour* and *professional uniform/national dress*. The Mexican node in TikzPeople is an excellent example of a stereotypical description.



Figure 1: A mexican in TikzPeople

Imagine the conundrum of an attempt to design an Indian or a British node. I needed to design my own clip arts.

2 Tikzclip

In this Tikzclip project, I attempt to create a set of TikZ clip arts which would support diversity and inclusivity. The design principle is simple: the figures would be *abstract* and the individual characters are depicted by the *tools* of the trade or the *flags* of the country.

The basic design is the following abstract figure. As we do not aim to accurately draw any specific body part, we could use any colour available to us via the xcolor package.

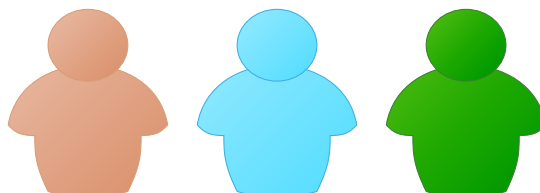


Figure 2: Our Design: The Basic Figures in Different Colors

```

\begin{figure}[htb]
  \centering
  \begin{tikzpicture}
    \begin{scope}[scale=0.5]
      \basic{Tan}
    \end{scope}
    \begin{scope}[scale=0.5, xshift=5cm]
      \basic{CornflowerBlue}
    \end{scope}
    \begin{scope}[scale=0.5, xshift=10cm]
      \basic{OliveGreen}
    \end{scope}
  \end{tikzpicture}
  \caption{ Our Design: The Basic Figures in Different Colors}
  \label{fig:Tikzclip-basic}
\end{figure}

```

To represent any national (using command `national`), the idea is to fix a badge with the corresponding national flag. Thus a mexican, using `Tikzclip` could be depicted as in Figure 3.



Figure 3: Our Design: Mexicans in Tikzclip

```

\begin{figure}[htb]
  \centering
  \begin{tikzpicture}
    \begin{scope}[scale=0.5]
      \national{Tan}{flags/mx.png}
    \end{scope}
    \begin{scope}[scale=0.5, xshift=5cm]
      \national{CornflowerBlue}{flags/mx.png}
    \end{scope}
    \begin{scope}[scale=0.5, xshift=10cm]
      \national{OliveGreen}{flags/mx.png}
    \end{scope}
  \end{tikzpicture}
  \caption{ Our Design: Mexicans in Tikzclip}
  \label{fig:Tikzclip-mexican}
\end{figure}

```

To represent any professional, the badge could be the tools they use. For example, a microscope could be a good badge to depict a scientist, a cycle could be used to depict a cyclist, and musical notations are candidate symbol for singers. The corresponding command here is `human`. The code is same as in the `national` except the size of the figure in the badge. You may need to play with `xclip` to get the solution you want.



Figure 4: A scientist, a Cyclist, and a Singer

```
\begin{figure}[htb]
  \centering
  \begin{tikzpicture}
    \begin{scope}[scale=0.5]
      \human{Tan}{microscope.png}
    \end{scope}
    \begin{scope}[scale=0.5,xshift=5cm]
      \human{CornflowerBlue}{cycle1.png}
    \end{scope}
    \begin{scope}[scale=0.5, xshift=10cm]
      \human{OliveGreen}{music2.png}
    \end{scope}
  \end{tikzpicture}
  \label{fig:Tikzclip-profession}
  \caption{ A scientist, a Cyclist, and a Singer}
\end{figure}
```

Of course, we may pick out some different tool for the badge, by using a different picture.



Figure 5: A scientist, a Cyclist, and a Singer

3 Usage

The tikz code of the figure is in the file `block.tex` and/or `preamble.tex`. If you want to use specific colour, see `dp.tex` for how to specify the colours in `rgb`. I have lifted and modified the basic structure of the figures in `tikzpeople`. So, latex credit goes to Nils.

Source code of the Tikzclip project is available at <https://github.com/rishirajb/tikzclip>. Please feel free to modify and use.

References

- [1] Nils Fleischhacker. *The tikzpeople package*. URL: <https://mirror.ox.ac.uk/sites/ctan.org/graphics/pgf/contrib/tikzpeople/tikzpeople.pdf>. (accessed: October 1, 2023).
- [2] Nils Fleischhacker. *tikzpeople – Draw people-shaped nodes in TikZ*. URL: <https://www.ctan.org/pkg/tikzpeople>. (accessed: October 1, 2023).

Character

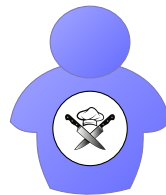
Our Design

TikzPeople

Pilot



Chef



Builder



Nurse



Doctor



4 If you want to depict a British person

Choose any colour you want...

