byo-twemojis v1.0

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Abstract

The **B**uild **Y**our **O**wn Twemoji package allows to create emojis based on elements of the "classical" round-circle based emojis by Twitter (see Table 3 for a list of the emojis that are meant).

1 Usage

\byoTwemoji   This package provides the command: `\byoTwemoji` [⟨*options*⟩] {⟨*elements*⟩}, it creates an emoji with the elements you listed in the ⟨*elements*⟩ argument. The ⟨*elements*⟩ argument is a string with element-names listed with a simicolon `;` as the divider, where the first element is "lower" in the picture than the second (i.e. it is covered by the second element if they overlap). For example, `\byoTwemoji{head; eyes normal opened; mouth laughing}` creates 😃, but `\byoTwemoji{mouth laughing; head; eyes normal opened}` creates 😶, as the `head` element covers the `mouth laughing` element. You can add options to a single element by adding `!` followed by the Ti*k*Z options; further detailes are explained in Section 1.1.

The ⟨*options*⟩ literally takes options for the Ti*k*Z picture the command creates. For example, `\byoTwemoji[rotate around=180]{head; eyes normal; mouth smiling}` creates 🙃. Further details can be found in Section 1.2.

Applying both features one ofter the other:

```
\byoTwemoji{head; eyes normal low; eyebrows angry; mouth
frowning}
```

```
\byoTwemoji{head; eyes normal low!yshift=-1; eyebrows
angry!yshift=1.8; mouth frowning!yshift=2}
```

```
\byoTwemoji[let Yellow=byoTwemojiRed, let
Brown=byoTwemojiBlack]{head; eyes normal low!yshift=-1;
eyebrows angry!yshift=1.8; mouth frowning!yshift=2}
```

The whole resulting picture is sized according to `\twemojiDefaultHeight` (the same size the `twemojis` package uses). Within the picture all elements have a size of `36x36` (the size of the "frame") and are anchored at `(0,0)` the upper left corner. Technically, the command creates a Ti*k*Z picture where all the elements (paths) are stacked above one another, the commands after `!` are directly used by the path elements.

Finding Element Names. The elements are listed in Section 3. They were gathered from the emojis listed in Table 3, but not all elements are directly available through a name. Many of the elements (e.g., normal eyes) repeat themselves regularly. I tried to get the list of named elements as small as possible.

1.1 Options for a single Element

When defining a twemoji, you can give every element (separated by `;`) individual Ti*k*Z properties. To do so use the syntax ⟨`element's name`⟩`!`⟨`options`⟩ The elements are defined via `\path` and everything that is ellegible there can also be put in the options (pretend that you simply add the options to the path directly, i.e.: separate them by a colon. You don't need to add a leading colon.).

The emojis themselfes are defined with the coordinate `(0,0)` in the top-left corner and to a size of `36`. The size is limited, meaning if you move or scale a component out of the `36x36` frame it will be cropped or not be visible. It you don't like that limitation either wrap a tikzpicture around the elements and modify those elements to your liking or redefine the `\byoTwemoji` without the `\crop` inside the tikzpicture (see `\byoTwemoji` in Section 5).

There are some options defined by the package to make certain scenarios easier. All these commands use a "scale to" logic, meaning it is not relative but absolute. The normal size of **all** elements (regardless their size in the emoji) is `36`, so to scale to half the size use the value `18`. The positional scaling commands only work properly to scale down. The positioning does not work while scaling up; `scale to` can still be used. Figure 1 depicts the styles that can be used to scale and position an emoji's element.
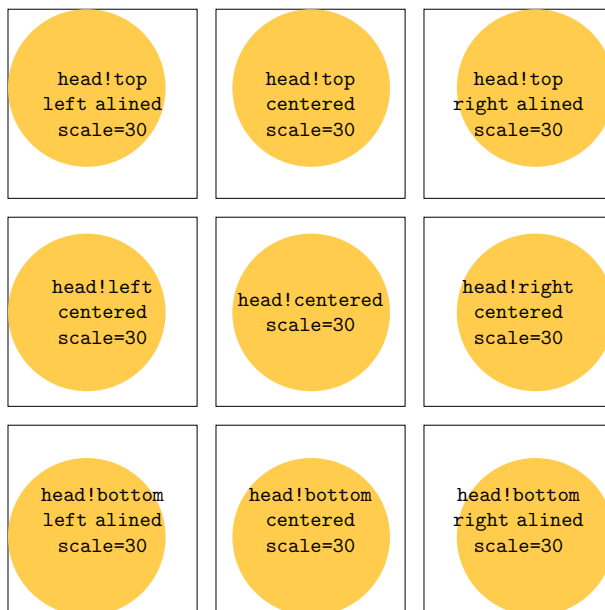
Figure 1: The styles for scaling visualized.

1.2 Options for the whole Emoji

The ⟨*options*⟩ argument is directly passed to the underlying Ti*k*Z picture. Hence, you can use everything that works there also on the emoji.

This package defines a set of colors (see Figure 2) that are given to the paths that represent the elements. This means to change the color of an element one would have to redefine the color globally (or withing a scope). As that is annoying to deal with this package defines Ti*k*Z parameters to define a color on a specifc picture. The two possible options are `let` ⟨*shortname*⟩=⟨*color name*⟩ or `set` ⟨*shortname*⟩={⟨*R*⟩, ⟨*G*⟩, ⟨*B*⟩}. A ⟨*shortname*⟩ is the name of one of the colors in Figure 2 without the prefix `byoTwemoji`. The `let` variant sets `byoTwemoji`⟨*shortname*⟩ to be an other, already defined, color. The `set` variant allows you to set `byoTwemoji`⟨*shortname*⟩ to an arbitrary RGB value. Examples:

is created by: `\byoTwemoji[set Yellow={254, 231, 184}]{head; eyes normal; mouth laughing}`

is created by: `\byoTwemoji[let Yellow=byoTwemojiLightGreen]{head; eyes sick; mouth sick}`

3

	byoTwemojiWhite {245, 248, 250}	byoTwemojiWhiteGray {225, 232, 237}
byoTwemojiLightGray {204, 214, 221}	byoTwemojiGray {153, 170, 181}	byoTwemojiDarkGray {103, 117, 127}
	byoTwemojiBlack {41, 47, 51}	
byoTwemojiLightBrown {130, 93, 14}	byoTwemojiBrown {102, 69, 0}	
	byoTwemojiYellow {255, 204, 77}	byoTwemojiDarkYellow {252, 171, 64}
byoTwemojiLightOrange {241, 144, 32}	byoTwemojiOrange {243, 108, 36}	byoTwemojiDarkOrange {181, 80, 5}
byoTwemojiLightRed {231, 91, 112}	byoTwemojiRose {255, 120, 146}	
	byoTwemojiRed {222, 49, 70}	byoTwemojiDarkRed {218, 47, 71}
	byoTwemojiWineRed {187, 26, 52}	byoTwemojiDarkWineRed {102, 33, 19}
byoTwemojiLightBlue {189, 221, 244}	byoTwemojiBlue {93, 173, 236}	byoTwemojiDarkBlue {42, 103, 151}
byoTwemojiLightGreen {119, 175, 87}	byoTwemojiGreen {93, 143, 63}	byoTwemojiDarkGreen {62, 114, 29}
byoTwemojiLightPurple {170, 141, 216}	byoTwemojiPurple {85, 57, 134}	
	byoTwemojiShadow {0, 0, 0}	

Figure 2: Shows the colors this package defines with their name and RGB value.

2 Licenses

2.1 Emojis

The emojis and all derived graphics belong to Twitter, Inc and other contributors (Copyright 2019). They are licensed under CC-BY 4.0: `https://creativecommons.org/licenses/by/4.0/`.

Hence, attribution of the original work is needed.

Attribution. I'm no lawyer, so take this section with a grain of salt.

As the emojis themselves are licensed under CC-BY they require attribution but are open to be distributed and modified anyway you like (which makes these packages possible). I'm not sure whether the attribution in the package's source code and in this repository is enough for a file (e.g. PDF) generated with this package to be covered as well (doubt it, really).

So, I see two different possibilities to attribute the emojis in a compiled document:

1. Add attribution to the metadata of the document. For example with `https://www.ctan.org/pkg/hyperxmp` in PDF files.

2. Add attribution in the document directly (e.g. on the last page of a presentation). For example:

   > Emoji graphics licensed under CC-BY 4.0: `https://creativecommons.org/licenses/by/4.0/` Copyright 2019 Twitter, Inc and other contributors

   I consider this option to be the safest.

2.2 LaTeX Package

The LaTeX packages are licensed under the LPPL 1.3 or later License.

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>
> This file may be distributed and/or modified under the conditions of the LaTeX Project Public License, either version 1.3 of this license or (at your option) any later version. The latest version of this license is in:
>
> `http://www.latex-project.org/lppl.txt`
>
> and version 1.3 or later is part of all distributions of LaTeX version 2005/12/01 or later.

3   List of available Elements

Element	Name	Element	Name
	bandage		blush
	censor bar		clown hair
	clown makeup		clown nose
	cold sweat		confetti
	cowboy hat		exhaling
	expression angry		expression boastful
	expression crying		expression laughing
	expression relieved		expression satisfied
	expression skeptical		expression sleepy
	expression smirking		expression thinking
	expression unamused		expression uneven
	expression weary		eyebrows angry
	eyebrows enjoying		eyebrows normal
	eyebrows skeptical		eyebrows weary
	eyebrows winking		eyebrows worried
	eyebrows worried raised		eyes closed
	eyes closed downcast		eyes closed laughing
	eyes closed laughing raised		eyes closed relaxed
	eyes disappointed		eyes hearts

Element	Name	Element	Name
⌐ ⌐	eyes heavy	$ $	eyes money
⎯ ⎯	eyes neutral	‿ ‿	eyes neutral closed
• •	eyes normal	• •	eyes normal low
• •	eyes normal low small	❚ ❚	eyes normal opened
• •	eyes normal small	• •	eyes normal tiny
○ ◉	eyes oO	👀	eyes pleading
◉ ◉	eyes rolling	◞ ◞	eyes sick
⌒ ⌒	eyes slightly smiling	⌒ ⌒	eyes slightly smiling raised
⌒ ⌒	eyes slightly smiling skewed	⌒ ⌒	eyes slightly smiling wide
⌃ ⌃	eyes smiling	★ ★	eyes stars
> <	eyes tightly closed	> <	eyes tightly closed pupil
◉ ◉	eyes wide open	○ ○	eyes wide open empty
• ⌃	eyes winking	⌒ ◉	eyes winking large
× ×	eyes xx	◡◡	glasses
	halo	🖐	hands hiding mouth
🤲	hands hugging	👆	hands shh
	hands shocked	👆	hands thinking
🤚	hands yawning		head
	head exploding	♥	heart at mouth

Element	Name	Element	Name
	hearts around head		horns
	icicles lower		icicles upper
	laughing tears		mask
	mouth buckteeth		mouth confounded
	mouth crying		mouth frowning
	mouth frowning deep		mouth frowning deeply
	mouth frowning open		mouth frowning open small
	mouth frowning open wide		mouth frowning slightly
	mouth frowning small		mouth goofy
	mouth grimacing		mouth grinning
	mouth half frowning		mouth half frowning deep
	mouth kissing		mouth laughing
	mouth neutral		mouth neutral small
	mouth open		mouth open oval
	mouth open sleeping		mouth open wide
	mouth open wide dropped jaw		mouth open wide screaming
	mouth open wide yawning		mouth party horn
	mouth puking		mouth sick
	mouth smiling		mouth smiling high
	mouth smiling large		mouth smiling raised

Element	Name	Element	Name
	mouth smiling small		mouth smiling tongue
	mouth smirking		mouth stuck-out tongue
	mouth stuck-out tongue money		mouth thermostat
	mouth thinking		mouth tongue hanging-out
	mouth watering		mouth wavy
	mouth zipped		party hat
	pinocchio nose		silly disguise
	snot		sunglasses
	sweat left right		sweat lower left
	sweat upper left		sweat upper right
	tear left		tear right
	tear stream		tissue

4   Examples

The "classical" emojis. These are created through this package and hence might slightly vary from the originals. These emojis where used to create the elements that are available within this package.

Emoji   **Arguments for \byoTwemoji:**

{head; eyes normal; mouth laughing}

{head; eyes smiling; mouth grinning}

{head; expression laughing; mouth laughing; laughing tears}

{head; eyes normal opened; mouth laughing}

{head; eyes closed laughing; mouth laughing}

{head; eyes closed laughing; mouth laughing; sweat upper right}

{head; eyes tightly closed pupil; mouth laughing}

{head; eyes smiling!yshift=1.2; mouth smiling high!yshift=1.2; halo}

[let Yellow=byoTwemojiLightPurple, let Brown=byoTwemojiPurple]
{horns; head; eyes normal low; eyebrows angry!yshift=2.2; mouth smiling!yshift=2}

{head; eyes winking; eyebrows winking; mouth smiling small}

{head; blush!yshift=-3; eyes slightly smiling; mouth smiling high}

{head; eyes slightly smiling wide; mouth smiling tongue}

{head; expression relieved; mouth smiling small}

{head; eyes hearts; mouth smiling large}

Emoji	Arguments for \byoTwemoji:
	{head; sunglasses; mouth smiling}
	{head; expression smirking; mouth smirking}
	{head; eyes normal!yshift=1.5; mouth neutral}
	{head; eyes neutral; mouth neutral}
	{head; expression unamused; mouth frowning}
	{head; eyes closed laughing; mouth frowning small; sweat upper left}
	{head; eyes closed downcast; mouth neutral small; eyebrows worried!yshift=1}
	{head; eyes normal!yshift=1.5; mouth half frowning}
	{head; eyes tightly closed pupil!yshift=2; eyebrows worried!yshift=1; mouth confounded}
	{head; eyes normal low!yshift=-4; mouth kissing}
	[let Shadow=byoTwemojiDarkYellow, set ShadowTransparency=.9] {head; eyes winking; eyebrows winking; mouth kissing; heart at mouth}
	{head; eyes smiling; mouth kissing}
	{head; blush; eyes closed; eyebrows normal; mouth kissing}
	{head; eyes normal; mouth stuck-out tongue}
	{head; eyes winking large; mouth stuck-out tongue}
	{head; eyes tightly closed pupil; mouth stuck-out tongue}
	{head; eyes disappointed; mouth frowning small}

Emoji	Arguments for \byoTwemoji:
	`{head; eyes normal!yshift=1.5; eyebrows worried; mouth frowning small}`
	`{head; eyes normal low!yshift=-1; eyebrows angry!yshift=1.8; mouth frowning!yshift=2}`
	`[let Yellow=byoTwemojiRed, let Brown=byoTwemojiBlack] {head; eyes normal low!yshift=-1; eyebrows angry!yshift=1.8; mouth frowning!yshift=2}`
	`{head; eyes normal!yshift=1.5; eyebrows normal; mouth frowning small; tear left}`
	`{head; eyes tightly closed; eyebrows worried!yshift=-1.8; mouth frowning open small}`
	`{head; expression boastful; mouth frowning deep; exhaling}`
	`{head; eyes normal!yshift=1.5; eyebrows worried; mouth frowning small; sweat lower left}`
	`{head; eyes normal!yshift=1.5; mouth frowning small}`
	`{head; eyes normal!yshift=1.5; eyebrows normal!yshift=-1.5; mouth frowning small}`
	`{head; cold sweat; eyes normal!yshift=1.5; eyebrows normal!yshift=-1.5; mouth frowning small!yshift=-1}`
	`{head; expression weary; mouth frowning open wide}`
	`{head; expression sleepy; mouth frowning small; snot}`
	`{head; eyes tightly closed!yshift=-2.5; eyebrows worried!yshift=-1.5; mouth frowning open}`
	`{head; eyes normal; mouth grimacing}`
	`{head; tear stream; expression crying; mouth crying}`

Emoji	**Arguments for \byoTwemoji:**
	{head; eyes normal; mouth open wide}
	{head; eyes normal; eyebrows normal!yshift=-2; mouth open}
	{head; cold sweat; eyes normal!yshift=1.5; eyebrows worried; mouth frowning small; sweat lower left}
	{head; cold sweat; hands shocked; eyes wide open empty; mouth open wide screaming}
	{head; eyes normal; eyebrows normal!yshift=-2; mouth open wide dropped jaw}
	{head; blush; eyes wide open; eyebrows normal!yshift=-2; mouth neutral small}
	[let Shadow=byoTwemojiDarkYellow, set ShadowTransparency=1] {head; eyes closed relaxed; mouth open sleeping; zzz}
	{head; eyes xx; eyebrows normal!yshift=-2; mouth open wide}
	{head; eyes normal!yshift=1.5;}
	{head; eyes heavy; mask}
	{head; eyes normal; mouth frowning}
	{head; eyes normal; mouth smiling!scale=.8,xshift=3.6,yshift=4.5}
	[rotate around={180:(18,18)}] {head; eyes normal; mouth smiling}
	{head; eyes rolling; mouth half frowning deep}
	{head; eyes normal; mouth zipped}
	{head; eyes money; mouth stuck-out tongue money}

Emoji	Arguments for \byoTwemoji:
	`{head; eyes normal!yshift=1.5; eyebrows worried; mouth thermostat}`
	`{head; eyes normal small; glasses; mouth buckteeth}`
	`{head; expression thinking; mouth thinking; hands thinking}`
	`{head; bandage; eyes closed laughing; mouth frowning small}`
	`{head!top centered scale=32; eyes closed laughing raised; mouth smiling raised; hands hugging}`
	`{head!bottom centered scale=30; eyes normal low!scale=.9,xshift=1.8,yshift=1; mouth smiling!scale=.8,xshift=3.6,yshift=7.2; cowboy hat}`
	`[set Yellow={254, 231, 184}]` `{head; clown makeup; clown nose; clown hair; mouth smiling!yscale=1.2,yshift=-3,fill=byoTwemojiRed; eyes normal!yshift=-2}`
	`[let Yellow=byoTwemojiLightGreen]` `{head; eyes sick; mouth sick}`
	`{head; eyes closed laughing; eyebrows enjoying; mouth watering}`
	`{head!left centered scale=32; eyes normal!left centered scale=32,yshift=-1.2; pinocchio nose; mouth half frowning!left centered scale=32,yshift=2.2}`
	`{head; eyes tightly closed pupil!yshift=-.5; mouth half frowning!xshift=3.5,yshift=1; tissue}`
	`{head; mouth neutral; expression skeptical}`
	`{head; eyes stars; mouth laughing}`
	`{head; eyes oO; mouth goofy}`

Emoji	Arguments for \byoTwemoji:
	{head; eyes normal small; eyebrows normal!yshift=-2; mouth open oval; hands shh}
	[let Yellow=byoTwemojiRed, let Brown=byoTwemojiBlack] {head; expression angry; censor bar}
	{head!top centered scale=34; eyes closed laughing!yshift=-3; hands yawning!xshift=3}
	{head!top centered scale=34; eyes tightly closed pupil; mouth puking}
	{head exploding; eyes normal low small; mouth open wide!yshift=3}
	[let Shadow=byoTwemojiDarkYellow, set ShadowTransparency=.9] {head; eyes smiling!yshift=-.5; mouth smiling!yshift=-2.5; hearts around head}
	{head; eyes slightly smiling raised; mouth open wide yawning; hands yawning}
	{head; eyes normal; mouth smiling; tear right}
	{head!bottom left alined scale=34; eyes slightly smiling skewed; mouth party horn; party hat; confetti}
	{head; expression uneven; mouth wavy}
	[let Yellow=byoTwemojiLightRed,let Brown=byoTwemojiBlack] {head; eyes normal!yshift=1.5; eyebrows worried; mouth tongue hanging-out; sweat left right}
	[let Yellow=byoTwemojiBlue, let Brown=byoTwemojiDarkBlue] {head; eyes normal; eyebrows worried raised; mouth grimacing; icicles upper; icicles lower}
	{head; eyes normal small; silly disguise}
	{head; eyes pleading; mouth frowning slightly}

Emoji   **Arguments for** \byoTwemoji:

☹️   {head; eyes normal; mouth frowning deeply}

☺️   {head; blush; expression satisfied; mouth smiling small}

5 Implementation

\forElementInList   This defines a list parser that splits elements at a semicolon ; and not at a colon ,. It takes two mandatory arguments, the makro to be called on an entry and the list itself.

```
1 \DeclareListParser*{\forElementInList}{;}
```

\byoTwemojiShadowTransparency   Some elements have shadows. Their opacity can be set by redefining this value.

```
2 \newcommand*{\byoTwemojiShadowTransparency}{0.1}
```

\twemojiDefaultHeight   Defines the length `twemojiDefaultHeight` if it is not already defined by the twemojis package.

```
3 \makeatletter
4 \@ifpackageloaded{twemojis}{}{%
5     \newlength{\twemojiDefaultHeight}%
6     \AtBeginDocument{\setlength{\twemojiDefaultHeight}{\fontcharht\font`X}}%
7 }
8 \makeatother
```

\defineByoTwemojiElement   Internal command to add a new element (as a command).

     \defineByoTwemojiElement {⟨*element's name*⟩} {⟨*element's* Ti*k*Z *paths*⟩}

     The resulting command takes one optional argument, which will be directly applied to the style of all Ti*k*Z paths of the element.

```
9 \newcommand{\defineByoTwemojiElement}[2]{%
10     \expandafter\newcommand\csname byo twemoji element #1\endcsname[1][]{#2}%
11 }
```

\byoTwemojiElement   Takes a string of the structure ⟨**name**⟩!⟨**options**⟩, where `name` is the name of the element and `options` are the Ti*k*Zoptions that should be applied to the element.

```
12 \newcommand{\byoTwemojiElement}[1]{%
13     \StrCut{#1}{!}{\scName}{\scOptions}%
14     \csname byo twemoji element \scName\endcsname[\scOptions]%
15 }
```

\byoTwemoji   Create a Ti*k*Z picture with all the elements stacked above one another (separated by ;). The picture is the size of \twemojiDefaultHeight.

     \byoTwemoji [⟨*options*⟩] {⟨*elements*⟩}

```
16 \newcommand{\byoTwemoji}[2][]{%
17     \resizebox{\twemojiDefaultHeight}{\twemojiDefaultHeight}{%
18         \begin{tikzpicture}[y=0.80pt, x=0.80pt, yscale=-1, #1]%
19             \clip (0,0) rectangle (36,36);%
20             \forElementInList{\byoTwemojiElement}{#2}%
21         \end{tikzpicture}%
22     }%
23 }
```

byoTwemoji Colors   This globally defines the colors used by the original twemojis. All colors are prefixed with `byoTwemoji` followed by a CamelCased color name.

```
24 \definecolor{byoTwemojiWhite}{RGB}{245,248,250}
25 \definecolor{byoTwemojiWhiteGray}{RGB}{225,232,237}
26 \definecolor{byoTwemojiLightGray}{RGB}{204,214,221}
27 \definecolor{byoTwemojiGray}{RGB}{153,170,181}
28 \definecolor{byoTwemojiDarkGray}{RGB}{103,117,127}
29 \definecolor{byoTwemojiBlack}{RGB}{41,47,51}
30 \definecolor{byoTwemojiLightBrown}{RGB}{130,93,14}
31 \definecolor{byoTwemojiBrown}{RGB}{102,69,0}
32 \definecolor{byoTwemojiYellow}{RGB}{255,204,77}
33 \definecolor{byoTwemojiDarkYellow}{RGB}{252,171,64}
34 \definecolor{byoTwemojiLightOrange}{RGB}{241,144,32}
35 \definecolor{byoTwemojiOrange}{RGB}{243,108,36}
36 \definecolor{byoTwemojiDarkOrange}{RGB}{181,80,5}
37 \definecolor{byoTwemojiLightRose}{RGB}{244,171,186}
38 \definecolor{byoTwemojiRose}{RGB}{255,120,146}
39 \definecolor{byoTwemojiLightRed}{RGB}{231,91,112}
40 \definecolor{byoTwemojiRed}{RGB}{222,49,70}
41 \definecolor{byoTwemojiDarkRed}{RGB}{218,47,71}
42 \definecolor{byoTwemojiWineRed}{RGB}{187,26,52}
43 \definecolor{byoTwemojiDarkWineRed}{RGB}{102,33,19}
44 \definecolor{byoTwemojiLightBlue}{RGB}{189,221,244}
45 \definecolor{byoTwemojiBlue}{RGB}{93,173,236}
46 \definecolor{byoTwemojiDarkBlue}{RGB}{42,103,151}
47 \definecolor{byoTwemojiLightGreen}{RGB}{119,175,87}
48 \definecolor{byoTwemojiGreen}{RGB}{93,143,63}
49 \definecolor{byoTwemojiDarkGreen}{RGB}{62,114,29}
50 \definecolor{byoTwemojiLightPurple}{RGB}{170,141,216}
51 \definecolor{byoTwemojiPurple}{RGB}{85,57,134}
52 \definecolor{byoTwemojiShadow}{RGB}{0,0,0}
```

TikZ options   This defines a number of TikZ options to be used either on the whole TikZ picture (optional parameter of `\byoTwemoji`), or on a single element (after the `!`).
To be used on the whole picture:

```
53 \tikzset{
54     let White/.code={\colorlet{byoTwemojiWhite}{#1}},
55     let WhiteGray/.code={\colorlet{byoTwemojiWhiteGray}{#1}},
56     let LightGray/.code={\colorlet{byoTwemojiLightGray}{#1}},
57     let Gray/.code={\colorlet{byoTwemojiGray}{#1}},
58     let DarkGray/.code={\colorlet{byoTwemojiDarkGray}{#1}},
59     let Black/.code={\colorlet{byoTwemojiBlack}{#1}},
60     let LightBrown/.code={\colorlet{byoTwemojiLightBrown}{#1}},
61     let Brown/.code={\colorlet{byoTwemojiBrown}{#1}},
62     let Yellow/.code={\colorlet{byoTwemojiYellow}{#1}},
63     let DarkYellow/.code={\colorlet{byoTwemojiDarkYellow}{#1}},
64     let LightOrange/.code={\colorlet{byoTwemojiLightOrange}{#1}},
65     let Orange/.code={\colorlet{byoTwemojiOrange}{#1}},
66     let DarkOrange/.code={\colorlet{byoTwemojiDarkOrange}{#1}},
67     let LightRose/.code={\colorlet{byoTwemojiLightRose}{#1}},
68     let Rose/.code={\colorlet{byoTwemojiRose}{#1}},
69     let LightRed/.code={\colorlet{byoTwemojiLightRed}{#1}},
```

```
70    let Red/.code={\colorlet{byoTwemojiRed}{#1}},
71    let DarkRed/.code={\colorlet{byoTwemojiDarkRed}{#1}},
72    let WineRed/.code={\colorlet{byoTwemojiWineRed}{#1}},
73    let DarkWineRed/.code={\colorlet{byoTwemojiDarkWineRed}{#1}},
74    let LightBlue/.code={\colorlet{byoTwemojiLightBlue}{#1}},
75    let Blue/.code={\colorlet{byoTwemojiBlue}{#1}},
76    let DarkBlue/.code={\colorlet{byoTwemojiDarkBlue}{#1}},
77    let LightGreen/.code={\colorlet{byoTwemojiLightGreen}{#1}},
78    let Green/.code={\colorlet{byoTwemojiGreen}{#1}},
79    let DarkGreen/.code={\colorlet{byoTwemojiDarkGreen}{#1}},
80    let LightPurple/.code={\colorlet{byoTwemojiLightPurple}{#1}},
81    let Purple/.code={\colorlet{byoTwemojiPurple}{#1}},
82    let Shadow/.code={\colorlet{byoTwemojiShadow}{#1}},
83    set White/.code={\definecolor{byoTwemojiWhite}{RGB}{#1}},
84    set WhiteGray/.code={\definecolor{byoTwemojiWhiteGray}{RGB}{#1}},
85    set LightGray/.code={\definecolor{byoTwemojiLightGray}{RGB}{#1}},
86    set Gray/.code={\definecolor{byoTwemojiGray}{RGB}{#1}},
87    set DarkGray/.code={\definecolor{byoTwemojiDarkGray}{RGB}{#1}},
88    set Black/.code={\definecolor{byoTwemojiBlack}{RGB}{#1}},
89    set LightBrown/.code={\definecolor{byoTwemojiLightBrown}{RGB}{#1}},
90    set Brown/.code={\definecolor{byoTwemojiBrown}{RGB}{#1}},
91    set Yellow/.code={\definecolor{byoTwemojiYellow}{RGB}{#1}},
92    set DarkYellow/.code={\definecolor{byoTwemojiDarkYellow}{RGB}{#1}},
93    set LightOrange/.code={\definecolor{byoTwemojiLightOrange}{RGB}{#1}},
94    set Orange/.code={\definecolor{byoTwemojiOrange}{RGB}{#1}},
95    set DarkOrange/.code={\definecolor{byoTwemojiDarkOrange}{RGB}{#1}},
96    set LightRose/.code={\definecolor{byoTwemojiLightRose}{RGB}{#1}},
97    set Rose/.code={\definecolor{byoTwemojiRose}{RGB}{#1}},
98    set LightRed/.code={\definecolor{byoTwemojiLightRed}{RGB}{#1}},
99    set Red/.code={\definecolor{byoTwemojiRed}{RGB}{#1}},
100   set DarkRed/.code={\definecolor{byoTwemojiDarkRed}{RGB}{#1}},
101   set WineRed/.code={\definecolor{byoTwemojiWineRed}{RGB}{#1}},
102   set DarkWineRed/.code={\definecolor{byoTwemojiDarkWineRed}{RGB}{#1}},
103   set LightBlue/.code={\definecolor{byoTwemojiLightBlue}{RGB}{#1}},
104   set Blue/.code={\definecolor{byoTwemojiBlue}{RGB}{#1}},
105   set DarkBlue/.code={\definecolor{byoTwemojiDarkBlue}{RGB}{#1}},
106   set LightGreen/.code={\definecolor{byoTwemojiLightGreen}{RGB}{#1}},
107   set Green/.code={\definecolor{byoTwemojiGreen}{RGB}{#1}},
108   set DarkGreen/.code={\definecolor{byoTwemojiDarkGreen}{RGB}{#1}},
109   set LightPurple/.code={\definecolor{byoTwemojiLightPurple}{RGB}{#1}},
110   set Purple/.code={\definecolor{byoTwemojiPurple}{RGB}{#1}},
111   set Shadow/.code={\definecolor{byoTwemojiShadow}{RGB}{#1}},
112   set ShadowTransparency/.code={\renewcommand*{\byoTwemojiShadowTransparency}{#1}},
```

To be used on an element:

```
113   scale to/.style={scale={#1/36}},
114   center/.style={center x={#1},center y={#1}},
115   center x/.style={xshift={(36-#1)/2}},
116   center y/.style={yshift={(36-#1)/2}},
117   align top/.style={yshift={0}},
```

```
118     align right/.style={xshift={36-#1}},
119     align bottom/.style={yshift={36-#1}},
120     align left/.style={xshift={0}},
121     centered scale/.style={scale to={#1},center={#1}},
122     top left alined scale/.style={scale to={#1},align top,align left},
123     top centered scale/.style={scale to={#1},align top,center x={#1}},
124     top right alined scale/.style={scale to={#1},align top,align right={#1}},
125     right centered scale/.style={scale to={#1},align right={#1}, center y={#1}},
126     bottom right alined scale/.style={scale to={#1},align bottom={#1}, align right={#1}},
127     bottom centered scale/.style={scale to={#1},align bottom={#1},center x={#1}},
128     bottom left alined scale/.style={scale to={#1},align bottom={#1},align left},
129     left centered scale/.style={scale to={#1},align left,center y={#1}},
130     dynamic style/.code={\tikzset{#1}}
131 }
```