Fancy paragraph designs with the fancypar package

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Gonzalo Medina

Universidad Nacional de Colombia – Sede Manizales

Departamento de Matemáticas y Estadística

gmedinaar@unal.edu.co

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Abstract

This package offers five predefined decorative styles for text paragraphs of a document; the user can easily control the styles' attributes using the key-value mechanism. The package also allows the creation of new fancy designs.

Contents

1 Introduction

The fancypar package exploits the "dissecting paragraphs with \lastbox" technique explained in Section 5.9.6 of Victor Eijkhout's TeX by Topic ([2]) to provide five predefined and easily customizable fancy paragraph styles. New designs can also be easily defined.

The five commands were designed for *text* paragraphs, so the mandatory argument of the five main commands described in Section 3, page 3 cannot contain, for example, displayed math. By the way, this paragraph was typeset using one of the predefined styles offered by this package.

The author will gladly receive suggestions, comments and bug reports.

1

2   User Interface

Simply load this package in the preamble of a document (i.e. the part of your document between `\documentclass` and `\begin{document}`) in the standard way:

```
\usepackage{fancypar}
```

This will make available the five predefined styles, through the commands `\NotebookPar`, `\ZebraPar`, `\DashedPar`, `\MarkedPar` and `\UnderlinedPar`, described in Section 3, page 3.

The fancypar package internally loads the xcolor package ([3]) without package options. If xcolor needs to be loaded with some options in a document, then fancypar must be loaded *after* xcolor to prevent a clash.

2.1   Package options

The fancypar package can also be loaded declaring some package options:

```
\usepackage[options]{fancypar}
```

Here (and in what follows) *options* represents a comma-separated list of *key=value* pairs[1], controlling some attributes of the predefined styles. The available options are described in Section 3, page 3 (a summary with the default values is shown in Table 1, page 6).

`\fancyparsetup`   Additionally, for a later change of options, the fancypar package offers the command `\fancyparsetup`:

```
\fancyparsetup{options}
```

So, for example,

```
\usepackage[colorone=blue!20,colortwo=red!20]{fancypar}
```

and

```
\usepackage{fancypar}
\fancyparsetup{colorone=blue!20,colortwo=red!20}
```

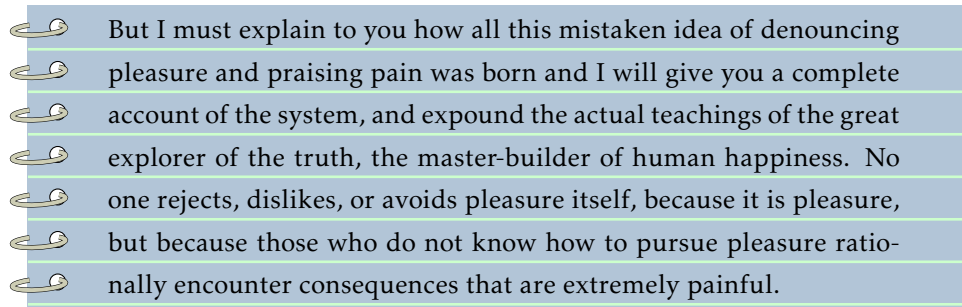[1]This feature was implemented using the xkeyval package ([1]).

will produce the same result. The advantage of `\fancyparsetup` is that it can be used not only in the preamble but on the body of the document, as many times as required. Even more control can be obtained using the optional argument for the commands `\NotebookPar`, `\ZebraPar`, `\DashedPar`, `\MarkedPar`, and `\UnderlinedPar`.

3   Predefined styles

Each of the commands `\NotebookPar`, `\ZebraPar`, `\DashedPar`, `\MarkedPar`, and `\UnderlinedPar` described in this section has one mandatory argument: the *text* paragraph to which the style will be applied to. As mentioned above, each style has some predefined settings which can be changed by using the corresponding options in either the `\usepackage` or `\fancyparsetup` commands or individually, by using the optional argument of the corresponding command.
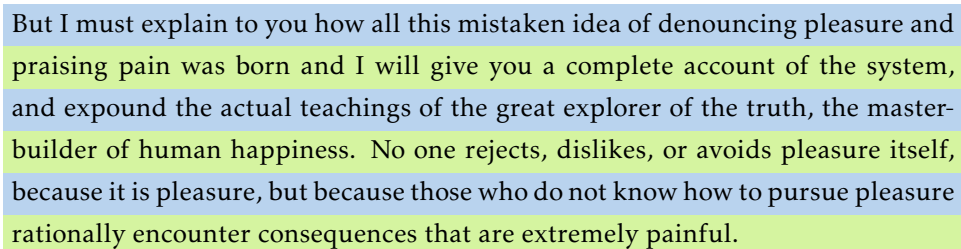
Below is an illustration of the look of the predefined styles, using some placeholder text (see Section 5, page 7).

The notebook style:

> But I must explain to you how all this mistaken idea of denouncing
> pleasure and praising pain was born and I will give you a complete
> account of the system, and expound the actual teachings of the great
> explorer of the truth, the master-builder of human happiness. No
> one rejects, dislikes, or avoids pleasure itself, because it is pleasure,
> but because those who do not know how to pursue pleasure ratio-
> nally encounter consequences that are extremely painful.

The zebra style:

> But I must explain to you how all this mistaken idea of denouncing pleasure and praising pain was born and I will give you a complete account of the system, and expound the actual teachings of the great explorer of the truth, the master-builder of human happiness. No one rejects, dislikes, or avoids pleasure itself, because it is pleasure, but because those who do not know how to pursue pleasure rationally encounter consequences that are extremely painful.

The marked style:

But I must explain to you how all this mistaken idea of denouncing pleasure and √
praising pain was born and I will give you a complete account of the system, √
and expound the actual teachings of the great explorer of the truth, the master- √
builder of human happiness. No one rejects, dislikes, or avoids pleasure itself, √
because it is pleasure, but because those who do not know how to pursue pleasure √
rationally encounter consequences that are extremely painful. √

The dashed style:

‒ ‒

But I must explain to you how all this mistaken idea of denouncing pleasure and
‒ ‒

praising pain was born and I will give you a complete account of the system,
‒ ‒

and expound the actual teachings of the great explorer of the truth, the master-
‒ ‒

builder of human happiness. No one rejects, dislikes, or avoids pleasure itself,
‒ ‒

because it is pleasure, but because those who do not know how to pursue pleasure
‒ ‒

rationally encounter consequences that are extremely painful.
‒ ‒

The underlined style:

But I must explain to you how all this mistaken idea of denouncing pleasure and
praising pain was born and I will give you a complete account of the system,
and expound the actual teachings of the great explorer of the truth, the master-
builder of human happiness. No one rejects, dislikes, or avoids pleasure itself,
because it is pleasure, but because those who do not know how to pursue pleasure
rationally encounter consequences that are extremely painful.

3.1 The notebook style

\NotebookPar   This command will present the affected paragraph as if it was written in a note-
book. Using the TikZ package ([4]), a spiral is added by default to the notebook
(the spiral can be activated/deactivated using the spiral option). The options
for this command are

linecolor=⟨*color*⟩	Color of the notebook's lines.
intercolor=⟨*color*⟩	Color of the rule between lines.
textcolor=⟨*color*⟩	Color of the text.
spiralcolor=⟨*color*⟩	Color of the spiral.
interheight=⟨*length*⟩	Height of the rule used between consecutive lines.
spiral=⟨*true*|*false*⟩	Activate/deactivate the spiral.
nbtextwidth=⟨*length*⟩	Text width inside the notebook (only affects the text).

The syntax is

```
\NotebookPar[options]{⟨text paragraph⟩}
```

3.2   The zebra-like style

\ZebraPar   This command will color every line of the affected paragraph using a two-color (zebra-like) pattern. The options for this command are

colorone=⟨*color*⟩	Background color of the odd-numbered lines.
colortwo=⟨*color*⟩	Background color of the even-numbered lines.
textcolorone=⟨*color*⟩	Color of the text in the odd-numbered lines.
textcolortwo=⟨*color*⟩	Color of the text in the even-numbered lines.

The syntax is

```
\ZebraPar[options]{⟨text paragraph⟩}
```

fancycolor   Internally, the counter fancycolor is used to alternate colors for the odd and
\FancyZColor   even-numbered lines, by redefining the command \FancyZColor. A little vari-
\FancyZTextColor   ation allows to achieve more sophisticated patterns with more than two alter-
nating colors (see Example 4, page 10). By an appropriate redefinition of the
\FancyZTextColor, some interesting patterns for the color of the text could also
be achieved.

3.3   The dashed paragraph

\DashedPar   This command uses the \xleaders TEX primitive to fill the textwidth with evenly spaced copies of a symbol (or "dash"). The options for this command are

dashsymbol=⟨*symbol*⟩	Symbol to be used as "dash".
dashcolor=⟨*color*⟩	Color for the symbol to be used as "dash".
separation=⟨*length*⟩	Distance between two copies of the symbol.

The syntax is as follows:

```
\DashedPar[options]{⟨text paragraph⟩}
```

3.4   Marking every line

\MarkedPar   This command will add a symbol (or "mark") to every line in the affected para-
graph; the options for this style are mark=⟨*symbol*⟩ (the symbol to be used as the
mark) and position=⟨*right|left*⟩ (the position of the symbol). The syntax is as
follows:

```
\MarkedPar[options]{⟨text paragraph⟩}
```

3.5 Underlining every line

\UnderlinedPar This command will underline every line of the affected paragraph. The only option for this command is rulecolor=⟨*color*⟩ which controls the color of the rule used. The syntax is

```
\UnderlinedPar[rulecolor=⟨color⟩]{⟨text paragraph⟩}
```

Command/Style	Options	Default
\NotebookPar	linecolor=⟨*color*⟩	SlateGray3!80 ▉
	intercolor=⟨*color*⟩	green!20 ▉
	textcolor=⟨*color*⟩	black
	interheight=⟨*length*⟩	1pt
	spiralcolor=⟨*color*⟩	LightYellow3 ▉
	spiral=⟨*true|false*⟩	true
	nbtextwidth=⟨*length*⟩	\textindentright
\ZebraPar	colorone=⟨*color*⟩	SlateGray2 ▉
	colortwo=⟨*color*⟩	DarkOliveGreen2!90!white!70 ▉
	textcolorone=⟨*color*⟩	black
	textcolortwo=⟨*color*⟩	black
\DashedPar	separation=⟨*length*⟩	0.9em
	dashsymbol=⟨*symbol*⟩	– (en-dash: --)
	dashcolor=⟨*color*⟩	blue!50 ▉
\MarkedPar	mark=⟨*symbol*⟩	$\surd$ √
	position=⟨*right|left*⟩	right
\UnderlinedPar	rulecolor=⟨*color*⟩	DarkOliveGreen3 ▉

Table 1: summary of the predefined styles, their options and their default values.

4 Defining new styles

\FancyPreFormat
\FancyFormat
\AddFancyFormat

The creation of new paragraph designs involves the redefinition of the two commands \FancyPreFormat and \FancyFormat. The redefinition of the former will have effect just before the first line of the affected paragraph, whilst the redefinition of the latter will affect all lines of the paragraph; the redefinition of

`\FancyFormat` *must* contain the `\box\linebox` construct. After redefining those commands, the actual typesetting of the modified paragraph is done by invoking `\vbox{#1\par\AddFancyFormat}`. Schematically the definition of a new style (called, for example, `\MyStylePar`) should have the following aspect:

```
\newcommand\MyStylePar[1]{%
  \renewcommand\FancyPreFormat{%
    ...some commands...
  \renewcommand\FancyFormat{%
    ...some commands...
      \box\linebox%
    ...some commands...
  }
    ...some commands...
  \vbox{#1\par\AddFancyFormat}%
    ...some commands...
}%
```

For a complete illustration of a new style definition, see Example 5, page 11.

5   Examples

In the following examples we will use some placeholder text, taken from H. Rackham's 1914 translation of Section 1.10.32 of "de Finibus Bonorum et Malorum", written by Cicero:

```
\newcommand*\testtext{But I must explain to you how all this
  mistaken idea of denouncing pleasure and praising pain was born
  and I will give you a complete account of the system, and
  expound  the actual teachings of the great explorer of the
  truth, the master-builder of human happiness. No one rejects,
  dislikes, or avoids pleasure itself, because it is pleasure, but
  because those who do not know how to pursue pleasure rationally
  encounter consequences that are extremely painful.}
```

Each example includes the complete compilable code (after addition of the above definition of the `\testtext` command) and its result.

Example 1   *The default predefined styles.*

```
\documentclass{article}
\usepackage[english]{babel}
\usepackage{fancypar}

\begin{document}
\textit{The notebook style:}
\NotebookPar{\testtext}
\textit{The zebra style:}
\ZebraPar{\testtext}
\textit{The marked style:}
\MarkedPar{\testtext}
\textit{The dashed style:}
\DashedPar{\testtext}
\textit{The underlined style:}
\UnderlinedPar{\testtext}
\end{document}
```

The output of this example is shown on Section 3, page 3.

Example 2   *Changing the predefined styles* (via \usepackage and \fancyparsetup).

```
\documentclass{article}
\usepackage[english]{babel}
\usepackage[x11names]{xcolor}
\usepackage[spiral=false,linecolor=Chocolate3!100!white!80]%
    {fancypar}

\begin{document}
\NotebookPar{\testtext}
\fancyparsetup{spiral=true,linecolor=LightGoldenrod3,
  interheight=2pt,intercolor=Cornsilk2}
\NotebookPar{\testtext}
\fancyparsetup{spiral=false,linecolor=OliveDrab4!100!white!90,
  interheight=0pt,textcolor=white}
\NotebookPar{\testtext}
\end{document}
```

But I must explain to you how all this mistaken idea of denouncing
pleasure and praising pain was born and I will give you a complete
account of the system, and expound the actual teachings of the great
explorer of the truth, the master-builder of human happiness. No
one rejects, dislikes, or avoids pleasure itself, because it is pleasure,
but because those who do not know how to pursue pleasure ratio-
nally encounter consequences that are extremely painful.

But I must explain to you how all this mistaken idea of denouncing
pleasure and praising pain was born and I will give you a complete
account of the system, and expound the actual teachings of the great
explorer of the truth, the master-builder of human happiness. No
one rejects, dislikes, or avoids pleasure itself, because it is pleasure,
but because those who do not know how to pursue pleasure ratio-
nally encounter consequences that are extremely painful.

But I must explain to you how all this mistaken idea of denouncing
pleasure and praising pain was born and I will give you a complete
account of the system, and expound the actual teachings of the great
explorer of the truth, the master-builder of human happiness. No
one rejects, dislikes, or avoids pleasure itself, because it is pleasure,
but because those who do not know how to pursue pleasure ratio-
nally encounter consequences that are extremely painful.

Example 3 *Changing the predefined styles* (via the optional argument of the commands).

```
\documentclass{article}
\usepackage[english]{babel}
\usepackage{fancypar}

\begin{document}
\MarkedPar{\testtext}
\MarkedPar[mark=\ddag,position=left]{\testtext}
\MarkedPar[mark=$\bullet$]{\testtext}
\end{document}
```

But I must explain to you how all this mistaken idea of denouncing pleasure and √
praising pain was born and I will give you a complete account of the system, √
and expound the actual teachings of the great explorer of the truth, the master- √
builder of human happiness. No one rejects, dislikes, or avoids pleasure itself, √
because it is pleasure, but because those who do not know how to pursue pleasure √
rationally encounter consequences that are extremely painful. √

‡ But I must explain to you how all this mistaken idea of denouncing pleasure and
‡ praising pain was born and I will give you a complete account of the system,
‡ and expound the actual teachings of the great explorer of the truth, the master-
‡ builder of human happiness. No one rejects, dislikes, or avoids pleasure itself,
‡ because it is pleasure, but because those who do not know how to pursue pleasure
‡ rationally encounter consequences that are extremely painful.

But I must explain to you how all this mistaken idea of denouncing pleasure and •
praising pain was born and I will give you a complete account of the system, •
and expound the actual teachings of the great explorer of the truth, the master- •
builder of human happiness. No one rejects, dislikes, or avoids pleasure itself, •
because it is pleasure, but because those who do not know how to pursue pleasure •
rationally encounter consequences that are extremely painful. •

Example 4   *In this example a three color zebra pattern is used for the lines of the paragraph.*

```
\documentclass{book}
\usepackage[english]{babel}
\usepackage[x11names]{xcolor}
\usepackage{fancypar}
\usepackage{intcalc}

\renewcommand{\FancyZColor}{%
  \ifcase\intcalcMod{\value{fancycount}}{3}%
    OliveDrab4!100!white!90\or Chocolate3!100!white!80%
      \or LightGoldenrod3\fi
}

\begin{document}
\ZebraPar{\testtext}
\end{document}
```

But I must explain to you how all this mistaken idea of denouncing pleasure and praising pain was born and I will give you a complete account of the system, and expound the actual teachings of the great explorer of the truth, the master-builder of human happiness. No one rejects, dislikes, or avoids pleasure itself, because it is pleasure, but because those who do not know how to pursue pleasure rationally encounter consequences that are extremely painful.

Example 5 | *Definition of a new style.* In this example we build a new style; the odd-numbered lines will be typeset in red and the even-numbered lines will be typeset in black.

```
\documentclass{article}
\usepackage[english]{babel}
\usepackage{fancypar}

\newcounter{mycount}

\newcommand\MyStylePar[1]{%
  \renewcommand\FancyPreFormat{\setcounter{mycount}{0}}
  \renewcommand\FancyFormat{%
    \stepcounter{mycount}
    \ifodd\themycount%
      \noindent\textcolor{red}{\box\linebox}%
    \else%
      \box\linebox%
    \fi%
  }
  \par\medskip%
  \vbox{\noindent#1\par\AddFancyFormat}%
  \par\medskip%
}%

\begin{document}
\MyStylePar{\testtext}
\end{document}
```

But I must explain to you how all this mistaken idea of denouncing pleasure and praising pain was born and I will give you a complete account of the system, and expound the actual teachings of the great explorer of the truth, the master-builder of human happiness. No one rejects, dislikes, or avoids pleasure itself, because it is pleasure, but because those who do not know how to pursue pleasure rationally encounter consequences that are extremely painful.

References

[1] Hendri Adriaens, The xkeyval package. http://www.ctan.org/pkg/xkeyval.

[2] Victor Eijkhout, TEX by Topic. http://www.eijkhout.net/tbt/.

[3] Dr. Uwe Kern, The xcolor package. http://www.ctan.org/pkg/xcolor.

[4] Till Tantau, The PGF/TikZ package. http://www.ctan.org/pkg/pgf.

Change History

6 Implementation

Standard identification:

```
1 \NeedsTeXFormat{LaTeX2e}
2 \ProvidesPackage{fancypar}[2019/01/18 v1.2 fancy paragraphs]
3
```

We load the necessary packages:

```
4 \@ifpackageloaded{xkeyval}{}{\RequirePackage{xkeyval}}
5 \@ifpackageloaded{tikz}{\usetikzlibrary{calc}}
6   {\RequirePackage{tikz}\usetikzlibrary{calc}}
7 \@ifpackageloaded{xcolor}{}{\RequirePackage{xcolor}}
8
```

colorone
colortwo
textcolorone
textcolortwo
linecolor
intercolor
interheight
spiralcolor
textcolor
nbtextwidth
mark
rulecolor
separation
dashcolor
dashsymbol

The xkeyval package was used to handle the package options that will also be used later on. First, the options declaration (prefix: FP, family: fancypar).

```
9  \DeclareOptionX[FP]<fancypar>{colorone}{\def\FancyZColorOne{#1}}
10 \DeclareOptionX[FP]<fancypar>{colortwo}{\def\FancyZColorTwo{#1}}
11 \DeclareOptionX[FP]<fancypar>{textcolorone}{\def\FancyZTextColorOne{#1}}
12 \DeclareOptionX[FP]<fancypar>{textcolortwo}{\def\FancyZTextColorTwo{#1}}
13 \DeclareOptionX[FP]<fancypar>{linecolor}{\def\FancyNlColor{#1}}
14 \DeclareOptionX[FP]<fancypar>{intercolor}{\def\FancyNilColor{#1}}
15 \DeclareOptionX[FP]<fancypar>{interheight}{\def\FancyNilHeight{#1}}
16 \DeclareOptionX[FP]<fancypar>{spiralcolor}{\def\FancyNSColor{#1}}
17 \DeclareOptionX[FP]<fancypar>{textcolor}{\def\FancyNTextColor{#1}}
18 \DeclareOptionX[FP]<fancypar>{nbtextwidth}{\def\FancyNTWidth{#1}}
19 \DeclareOptionX[FP]<fancypar>{mark}{\def\FancyMark{#1}}
20 \DeclareOptionX[FP]<fancypar>{rulecolor}{\def\FancyUColor{#1}}
21 \DeclareOptionX[FP]<fancypar>{separation}{\def\FancyDSeparation{#1}}
22 \DeclareOptionX[FP]<fancypar>{dashcolor}{\def\FancyDColor{#1}}
23 \DeclareOptionX[FP]<fancypar>{dashsymbol}{\def\FancyDSymbol{#1}}
24
```

\textindent
\textindentright

The length \textindent will be used to control the indentation of the paragraph in the notebook style, depending on whether or not the spiral will be used. The length \textindentright controls the distance from the right indentation of the text; it is set to \textwidth-2cm.

```
25 \newlength\textindent{}
26 \newlength\textindentright{}
27 \setlength\textindentright{\textwidth}
28 \addtolength\textindentright{-2cm}
29
```

spiral

The boolean key spiral is used here to set \textindent appropriately and will be used in the definition of the notebook style to draw or not the spiral.

```
30 \define@boolkey[FP]{fancypar}{spiral}{%
31 \ifFP@fancypar@spiral
32   \setlength\textindent{-2.6mm}%
33 \else
```

```
34    \setlength\textindent{3mm}%
35 \fi
36 }
37
```

position The choince-key `position` is used to specify the placement of the mark in the marked style.

```
38 \define@choicekey+[FP]{fancypar}{position}[\val\nr]{left,right}{%
39    \ifcase\nr\relax
40       \def\FancyMarkPosition{\llap{\mbox{\FancyMark\quad}}\box\linebox}
41    \or
42       \def\FancyMarkPosition{\box\linebox\rlap{\mbox{\quad\FancyMark}}}
43    \fi
44 }{%
45    \PackageWarning{fancypar}{erroneous input ignored}%
46 }
47
48 \DeclareOptionX*{\PackageWarning{fancypar}{\CurrentOption ignored}}
49
```

Now we define some of the colors that will be used by default. We use the RGB system to define colors already present in the x11names family, just to avoid loading the xcolor package with options.

```
50 \definecolor{zcolori}{RGB}{185,211,238}%SlateGray2
51 \definecolor{zcolorii}{RGB}{188,238,104}%DarkOliveGreen2
52 \definecolor{lcolor}{RGB}{159,182,205}%SlateGray3
53 \definecolor{scolor}{RGB}{205,205,180}%LightYellow3
54 \definecolor{rcolor}{RGB}{162,205,90}%DarkOliveGreen3
55
```

We set the default value for the keys that were defined.

```
56 \ExecuteOptionsX[FP]<fancypar>{%
57    colorone=zcolori,%
58    colortwo=zcolorii!90!white!70,%
59    textcolorone=black,%
60    textcolortwo=black,%
61    linecolor=lcolor!80,%
62    intercolor=green!20,%
63    interheight=1pt,%
64    spiralcolor=scolor,%
65    spiral=true,%
66    textcolor=black,%
67    nbtextwidth=\textindentright,%
68    mark=$\surd$,% \changes{v 1.1}{2010/04/25}{changed to $\surd$}
69    rulecolor=rcolor,%
70    position=right,%
71    dashcolor=blue!50,%
72    separation=0.9em,%
73    dashsymbol=--
```

```
74 }
75
```

Now comes the processing of the keys and values which will be passed by the user to the package.

```
76 \ProcessOptionsX[FP]<fancypar>
77
```

\fancyparsetup Definition of the command to control attributes in the preamble or at any point of the document.

```
78 \DeclareRobustCommand*\fancyparsetup[1]{%
79   \setkeys[FP]{fancypar}{#1}
80 }
81
```

\NotebookPar Now, to the definition of the five predefined styles. \NotebookPar comes first.

```
82 %%%% notebook %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
83 \newcommand\NotebookPar[2][]{%
84   \begingroup
85   \setkeys[FP]{fancypar}{#1}
86   \renewcommand\FancyPreFormat{\smallskip}
87   \renewcommand\FancyFormat{%
88     \hskip\textindent%
89     \tikz{%
90       \draw[draw=black,fill=white] (-1,-0.3) circle (3pt);%
91       \ifFP@fancypar@spiral
92         \draw[very thin,rotate=4,double=\FancyNSColor,%
93           double distance=1.5pt]%
94           (-1,-0.2) arc (40:-250:10pt and 2pt);%
95       \else\relax
96       \fi
97     }
98     \hskip4mm\vphantom{\strut}%
99     \textcolor{\FancyNTextColor}{\box\linebox}%
100    \color{\FancyNilColor}\hrule height\FancyNilHeight%
101    \smallskip%
102  }
103  \setlength\parindent{0pt}
104  \par\vskip\baselineskip
105  \noindent%
106  \begin{tikzpicture}[inner sep=-1.1pt]%
107    \setlength\fboxsep{0pt}%
108    \node (a) {\colorbox{\FancyNlColor}{%
109      \vbox{%
110        \vskip-0.5mm\parshape 1 0cm \FancyNTWidth%
111        \def\par{{\@@par}}% A trick that executes the real "par" = \@@par in-
   side a group so that the parshape is restored. Thanks to Frank Mittelbach.
112        #2\@@par
113        \add@fancy@format%
114      }%
```

15

```
115     }%
116   } {};
117   \end{tikzpicture}
118   \par\bigskip
119   \endgroup
120 }
121
```

fancycount Next, we define the counter `fancycount`, and the command `\FancyZColor`
\FancyZColor used to produce the zebra-like pattern (by changing the color depending on
\FancyZTextColor whether the value of the counter is odd or even). We also define the command
`\FancyZTextColor` to allow a similar definition for the color of the text lines.
The counter and the commands can be used, or redefined by the user, in a LaTeX
document to produce more sophisticated zebra-like designs.

```
122 \newcounter{fancycount}
123 \newcommand\FancyZColor{}
124 \renewcommand\FancyZColor{%alternate line colors
125   \ifodd\thefancycount %
126     \FancyZColorOne%
127   \else
128     \FancyZColorTwo%
129   \fi
130 }
131
132 \newcommand\FancyZTextColor{}
133 \renewcommand\FancyZTextColor{%alternate text colors
134   \ifodd\thefancycount %
135     \FancyZTextColorOne%
136   \else
137     \FancyZTextColorTwo%
138   \fi
139 }
140
```

\ZebraPar Now, the definition of \ZebraPar.

```
141 %%%% zebra %%%%%%%%%%%%%%%%%%%%%%%%%%%%%
142 \newcommand\ZebraPar[2][]{%
143   \begingroup
144   \setkeys[FP]{fancypar}{#1}%
145   \renewcommand\FancyPreFormat{\setcounter{fancycount}{0}}%
146   \renewcommand\FancyFormat{%
147     \noindent\stepcounter{fancycount}%
148     \makebox[\textwidth]{\colorbox{\FancyZColor}{%
149       \textcolor{\FancyZTextColor}{\box\linebox}}}%
150     \hrule height 0pt%
151   }
152   \par\smallskip\noindent%
153   \vbox{#2\par\add@fancy@format}%
154   \par\smallskip%
```

```
155    \endgroup
156 }
157
```

Definition of the leader that will be used in \DashedPar.

```
158 \def\leaderfill{%
159    \color{\FancyDColor}%
160    \xleaders\hbox to \FancyDSeparation{\hss\FancyDSymbol\hss}\hfill%
161 }
162
```

The turn now is for \DashedPar.

```
163 %%%% dashed %%%%%%%%%%%%%%%%%%%%%%%%%%%
164 \newcommand\DashedPar[2][]{%
165    \begingroup
166    \setkeys[FP]{fancypar}{#1}%
167    \renewcommand\FancyPreFormat{%
168       \hbox to \textwidth{\leaderfill}%
169       \vskip-\baselineskip%
170    }
171    \renewcommand\FancyFormat{%
172       \vphantom{\strut}\box\linebox%
173       \hbox to \textwidth{\leaderfill}%
174       \vskip-\baselineskip%
175    }
176    \par\medskip
177    \vbox{\noindent#2\par\add@fancy@format\medskip}%
178    \par\bigskip
179    \endgroup
180 }%
181
```

The definition of \MarkedPar.

```
182 %%%% marked %%%%%%%%%%%%%%%%%%%%%%%%%%%
183 \newcommand\MarkedPar[2][]{%
184    \begingroup
185    \setkeys[FP]{fancypar}{#1}
186    \renewcommand\FancyPreFormat{}
187    \renewcommand\FancyFormat{%
188       \noindent%
189       \FancyMarkPosition\par%
190    }%
191    \par\medskip%
192    \vbox{#2\par\add@fancy@format}%
193    \par\medskip%
194    \endgroup
195 }
196
```

\UnderlinedPar And last, but not least, the definition of \UnderlinedPar.

```
197 %%%% underlined %%%%%%%%%%%%%%%%%%%%%%%%%%%%%
198 \newcommand\UnderlinedPar[2][]{
199     \begingroup
200     \setkeys[FP]{fancypar}{#1}
201     \renewcommand\FancyPreFormat{}%
202     \renewcommand\FancyFormat{%
203         \box\linebox\color{\FancyUColor}\hrule
204         \smallskip
205     }
206     \par\medskip%
207     \vbox{\noindent#2\par\add@fancy@format}
208     \par\medskip%
209     \endgroup
210 }
211
```

\add@fancy@format The simple, yet powerful macro that makes use of \lastbox to dissect a paragraph; this macro is the core of this package; it is invoked in each one of the five predefined styles (and must be used in newly defined ones). A description can be found in [2].

```
212 \newsavebox\linebox%
213 \def\add@fancy@format{%
214     \setbox\linebox\lastbox
215     \ifvoid\linebox\FancyPreFormat\else
216         \unskip
217         \unpenalty
218         \unskip %Allows more than one paragraph in MarkedPar, DashedPar, Ze-
    braPar, and UnderlinedPar. Thanks to Frank Mittelbach
219         {\add@fancy@format}%
220         \FancyFormat
221     \fi
222 }
223
```

\AddFancyFormat A copy of \add@fancy@format which the user can employ to apply new styles defined with the two commands below.

```
224 \let\AddFancyFormat\add@fancy@format
225
```

\FancyPreFormat These two commands will allow the user to define his/her own styles.
\FancyFormat
```
226 \newcommand\FancyPreFormat{}%
227 \newcommand\FancyFormat{}%
```

Index

Numbers written in italic refer to the page where the corresponding entry is described; numbers underlined refer to the code line of the definition; numbers in roman refer to the code lines where the entry is used.

19