

**gzt** — A bundle of two classes and **biblatex** package styles for the French journal  
“La Gazette de la Société Mathématique de France”\*

## Implementation

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Released ?

### Abstract

This bundle provides two classes and **biblatex** package styles for the French journal “La Gazette de la Société Mathématique de France”:

- **gzt** for the complete issues of the journal, aimed at the Gazette’s team,
- **gztarticle**, intended for authors who wish to publish an article in the Gazette. This class’s goals are to
  - faithfully reproduce the layout of the Gazette, thus enabling the authors to be able to work their document in actual conditions, and
  - provide a number of tools (commands and environments) to facilitate the drafting of documents, in particular those containing mathematical formulas.

## 1 Auxiliary files

### 1.1 Gazette’s logo

Before the code of the **gzt** class by itself, we give the beginning of the code of the source file of the Gazette’s logo (to be compiled with **lualatex**).

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\*This file describes version ?, last revised ?.

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```

1 <*class-logo>

2 \documentclass[varwidth]{standalone}
3 \usepackage{fontspec}
4 \usepackage[cmym]{xcolor}
5 \usepackage{xparse}
6 \setmainfont{HelveticaNeueLTStd-ThEx}
7 \newfontfamily\deLa{HelveticaNeueLTStd-Th}
8 \newfontfamily\mathematiciens{HelveticaNeueLTStd-Lt}
9 \ExplSyntaxOn
10 \tl_new:N \l__gzt_frontmatter_head_text_tl
11 \tl_set:Nn \l__gzt_frontmatter_head_text_tl {
12   \addfontfeature{LetterSpace=10}
13   \textcolor{__gzt_generic_light_color}{
14     \fontsize{21}{0}\selectfont
15     la
16     \hspace{3mm}
17     \fontsize{46}{0}\selectfont
18     Gazette
19   }
20   \[1.7mm]
21   \fontsize{12}{0}\selectfont
22   \mbox{} \hfill%
23   \textcolor{__gzt_generic_light_color}{
24     \deLa
25     de~ la~
26   }
27   \textcolor{__gzt_generic_dark_color}{
28     \mathematiciens
29     Sociéte~ Mathématique~ de~ France
30   }
31 }
32 \NewDocumentCommand \frontmatterheadtext {} {
33   \l__gzt_frontmatter_head_text_tl
34 }

35 </class-logo>

```

## 1.2 (`biblatex` package) Data model

Before the code of the `gzt` class by itself, we give the (`biblatex`) data model that enriches the default one for several purposes:

- the interviews,
- the books reviews,
- the books advertisements,
- the tributes.

```
36 <*languagemodel>
37 \ProvidesFile{gzt.lbx}
38 \InheritBibliographyExtras{french}
39 \DeclareBibliographyStrings{
40   inherit      = {french},
41   number      = {{\no}{\no}},
42   volume      = {{volume}{vol\addot}},
43   volumes     = {{volumes}{vol\addot}},
44 }
45 </languagemodel>
46 <*datamodel>
```

### 1.2.1 For the interviews

First, we create the new entry type `interview` and the new field `interviewee`.

```
47 % \DeclareDatamodelEntrytypes{interview}
48 \DeclareDatamodelFields[type=list,datatype=name]{interviewee}
```

Then, we declare the fields known by the entry type `interview`: our new field `interviewee` and the existing one `author`.

```
49 \DeclareDatamodelEntryfields[interview]{
50   interviewee,
51   author
52 }
```

An finally, we create the bibliography driver for the `interview` (that seems to create the corresponding new entry).

```
53 \DeclareBibliographyDriver{interview}{%  
54   \printnames{author}~ interview~ \printnames{interviewee}%  
55   \usebibmacro{finentry}%  
56 }
```

### 1.2.2 For the tributes

First, we create the new entry type `tribute` and the new field `honouree`.

```
57 % % \DeclareDatamodelEntrytypes{tribute}  
58 % % \DeclareDatamodelFields[type=list,datatype=name]{honouree}  
59 %
```

Then, we declare the fields known by the entry type `tribute`: our new field `honouree` and the existing one `author`.

```
60 % \DeclareDatamodelEntryfields[tribute]{  
61 %   honouree,  
62 %   author  
63 % }  
64 %
```

An finally, we create the bibliography driver for the `tribute` (that seems to create the corresponding new entry).

```
65 % \DeclareBibliographyDriver{tribute}{%  
66 %   \printnames{author}~ rendent~ hommage~ \`a~ \printnames{honouree}%  
67 %   \usebibmacro{finentry}%  
68 % }  
69 %
```

### 1.2.3 For the books reviews

First, we create the new bibliography driver `bookreview` (that seems to create the corresponding new entry).

```
70 \DeclareBibliographyDriver{bookreview}{%  
71   \usebibmacro{bibindex}%  
72   \usebibmacro{begentry}%  
73   \usebibmacro{maintitle+title}%
```

```

74 \newline\nopunct\newblock
75 \usebibmacro{author/editor+others/translator+others}%
76 \setunit{\labelnamepunct}
77 \newline\nopunct\newblock
78 \usebibmacro{byauthor}%
79 \newunit\newblock
80 \usebibmacro{byeditor+others}%
81 \newunit\newblock
82 \printfield{edition}%
83 \newunit
84 \iffieldundef{maintitle}
85   {\printfield{volume}%
86     \printfield{part}}
87   {}%
88 \newunit
89 \printfield{volumes}%
90 \newunit\newblock
91 \usebibmacro{series+number}%
92 \newunit\newblock
93 \printfield{note}%
94 \newunit\newblock
95 \usebibmacro{publisher+location+date}%
96 \newunit\newblock
97 \usebibmacro{chapter+pages}%
98 \newunit
99 \printfield{pagetotal}%
100 \newunit\newblock
101 \printlist{language}%
102 \newunit\newblock
103 \iftoggle{bbx:isbn}
104   {\printfield{isbn}}
105   {}%
106 \newunit\newblock
107 \usebibmacro{doi+eprint+url}%
108 \newunit\newblock
109 \usebibmacro{addendum+pubstate}%
110 \setunit{\bibpagerefpunct}\newblock
111 \usebibmacro{pageref}%

```

```

112 \newunit\newblock
113 \iftoggle{bbx:related}
114   {\usebibmacro{related:init}}%
115   \usebibmacro{related}}
116 {}%
117 \usebibmacro{finentry}}

```

Then, we create the new fields `reviewer` and `reviewerinstitution` and make them known by the entry type `bookreview`.

```

118 \DeclareDatamodelFields[type=list,datatype=name]{reviewer}
119 \DeclareDatamodelFields[type=list,datatype=literal]{reviewerinstitution}
120 \DeclareDatamodelEntryfields[bookreview]{
121   reviewer,
122   reviewerinstitution
123 }

```

#### 1.2.4 For the books advertisements

We create some new fields make them known by the entry type `bookadvertisement`.

```

124 \DeclareDatamodelFields[type=field,datatype=literal]{publicprice}
125 \DeclareDatamodelFields[type=field,datatype=literal]{smfprice}
126 \DeclareDatamodelFields[type=field,datatype=literal]{frenchabstract}
127 \DeclareDatamodelFields[type=field,datatype=literal]{englishabstract}
128 \DeclareDatamodelFields[type=list,datatype=literal]{copublisher}
129 \DeclareDatamodelFields[type=field,datatype=verbatim]{thumbnail}
130 \DeclareDatamodelEntryfields[bookadvertisement]{
131   publicprice,
132   smfprice,
133   frenchabstract,
134   englishabstract,
135   copublisher,
136   thumbnail
137 }

```

Then, we create the new bibliography driver `bookadvertisement` (that seems to create the corresponding new entry).

```

138 \newcommand*{\insertbibimage}[1]{\includegraphics[width=45mm]{#1}}
139 \DeclareBibliographyDriver{bookadvertisement}{%

```

```

140 \begin{tcolorbox}[
141   lefthand width=47.5mm
142   ,sidebyside
143   ,colback=white
144   ,fontlower=\large
145   ,flushleft lower
146   ,boxrule=0mm
147   ,frame hidden
148   ,leftright skip=0mm
149   ,before skip=0mm
150   ,lower separated=false
151 ]
152 \iffieldundef{thumbnail}
153 {}
154 {
155   \usefield{\insertbibimage}{thumbnail}
156 }
157 \tcblower
158 \xpatchfieldformat{title}{mkbibemph}{textbf}{}{}%
159 \def\abx@str{abx@lstr}%
160 \noindent
161 \usebibmacro{bibindex}%
162 \usebibmacro{begentry}%
163 \textbf{\printfield{series}}%
164 % \usebibmacro{series+number}%
165 \bigskip\newline\nopunct\newblock
166 {%
167   \Large%
168   \printfield{title}%
169   \newunit\newblock
170 }%
171 \iffieldundef{volume}
172 {}%
173 {\textbf{\printfield{volume}}}
174 \iffieldundef{titleaddon}
175 {}%
176 {%
177   \newline\nopunct\newblock

```

```

178     \textbf{\printfield{titleaddon}}%
179 }
180 \iffieldundef{subtitle}
181 {}%
182 {%
183     \newline\nopunct\newblock
184     \printfield{subtitle}%
185 }
186 \newline\nopunct\newblock
187 \newline\nopunct\newblock
188 \usebibmacro{author/editor+others/translator+others}%
189 \setunit{\labelnamepunct}
190 \newline\nopunct\newblock
191 \usebibmacro{byauthor}%
192 \newunit\newblock
193 \usebibmacro{byeditor+others}%
194 \newunit\newblock
195 \printfield{edition}%
196 \newunit\newblock
197 \printfield{note}%
198 \newunit\newblock
199 \usebibmacro{publisher+location+date}%
200 \newunit\newblock
201 \usebibmacro{chapter+pages}%
202 \newunit
203 \printfield{pagetotal}%
204 \newunit\newblock
205 \printlist{language}%
206 \iftoggle{bbx:isbn}
207 {%
208     \newline\nopunct\newblock
209     \printfield{isbn}
210 }
211 {}%
212 \newunit\newblock
213 \usebibmacro{doi+eprint+url}%
214 \newunit\newblock
215 \usebibmacro{addendum+pubstate}%

```



```

216 \setunit{\bibpagerefpunct}\newblock
217 \usebibmacro{pageref}%
218 \def\abx@str{abx@sstr}%
219 \end{tcolorbox}
220 \iflistundef{copublisher}
221 {}%
222 {%
223 \bigskip
224 % \newline\nopunct\newblock%
225 \normalsize
226 Publi\`e avec le concours de : \printlist{copublisher}%
227 \par
228 }
229 \iffieldundef{frenchabstract}
230 {}%
231 {%
232 \bigskip
233 \printfield{frenchabstract}%
234 \par
235 \medskip
236 %
237 \begin{center}
238 Prix~ public~ :\c_space_tl
239 \EUR{\printfield{publicprice}}
240 \c_space_tl\textendash\c_space_tl Prix~ membre~ \smf{}~ :\c_space_tl
241 \EUR{\printfield{smfprice}}
242 \c_space_tl\textendash\c_space_tl Frais~ de~ port~ non~ compris
243 \end{center}
244 }
245 \iffieldundef{englishabstract}
246 {}%
247 {%
248 \par
249 \bigskip
250 \begin{otherlanguage}{english}
251 \itshape
252 \printfield{englishabstract}
253 %

```

```

254     \par
255     \medskip
256     %
257     \begin{center}
258         Public~ price:\c_space_tl
259         \EUR{\printfield{publicprice}}
260         \c_space_tl\textendash\c_space_tl \smf{}~ member~ price:\c_space_tl
261         \EUR{\printfield{smfprice}}
262         \c_space_tl\textendash\c_space_tl Shipping~ costs~ not~ included
263     \end{center}
264     \end{otherlanguage}
265 }
266 \usebibmacro{finentry}
267 }
268 </datamodel>

```

## 2 Implementation of the `gzt` class

Here comes the code of the `gzt` class.

```

269 <*class>

```

### 2.1 Removability of local customizations

We define two...

```

270 \def\sectioncommandslst{}
271 \let\saved@ifdefinable\@ifdefinable
272 \let\saved@@ifdefinable\@@ifdefinable
273 \newcommand{\startcustomization}{%
274     % Redefine \@ifdefinable
275     \renewcommand{\@ifdefinable}[2]{%
276         \listadd\sectioncommandslst##1%
277         \saved@ifdefinable{##1}{##2}%
278     }%
279     \renewcommand{\@@ifdefinable}[2]{%

```

```

280   \listadd\sectioncommandslst##1%
281   \saved@ifdefinable{##1}{##2}%
282 }%
283 }
284 \newcommand{\cleancustomization}{%
285   \forlistloop{\undef}{\sectioncommandslst}%
286   \def\sectioncommandslst{}%
287   \let@ifdefinable\saved@ifdefinable%
288   \let@ifdefinable\saved@ifdefinable%
289 }
290 </class>
291 <*class | class-article>

```

Extending etoolbox's patching commands:

```

292 \RequirePackage{xpatch}

```

We alter the behaviour of the internals of `\usetikzlibrary` so that the L<sup>A</sup>T<sub>E</sub>X 2<sub>ε</sub> push/pop filename system is used (see <https://tex.stackexchange.com/a/57428/18401>).

```

293 \patchcmd
294   {\use@tikzlibrary}
295   {%
296     \pgfutil@InputIfFileExists{tikzlibrary\pgf@temp.code.tex}{}{
297       \pgfutil@IfFileExists{pgflibrary\pgf@temp.code.tex}{%
298         \expandafter\usepgflibrary\expandafter{\pgf@temp}%
299       }{%
300         \tikzerror{I did not find the tikz library
301           '\pgf@temp'. I looked for files named
302           tikzlibrary\pgf@temp.code.tex and
303           pgflibrary\pgf@temp.code.tex, but neither
304           could be found in the current texmf trees.}
305       }%
306     }%
307   }
308   {%
309     \@pushfilename

```

```

310 \pgfutil@InputIfFileExists{tikzlibrary\pgf@temp.code.tex}{-}{
311 \pgfutil@IfFileExists{pgflibrary\pgf@temp.code.tex}{%
312 \expandafter\usepgflibrary\expandafter{\pgf@temp}%
313 }{
314 \tikzerror{I did not find the tikz library
315 '\pgf@temp'. I looked for files named
316 tikzlibrary\pgf@temp.code.tex and
317 pgflibrary\pgf@temp.code.tex, but neither
318 could be found in the current texmf trees.}
319 }%
320 }%
321 \@popfilename
322 }
323 {}{}
324 \patchcmd
325 {\tcb@input@library@in}
326 {%
327 \input\tcbpkgprefix#1\relax%
328 }
329 {%
330 \@pushfilename
331 \input\tcbpkgprefix#1\relax%
332 \@popfilename
333 }
334 {}{}

```

In order to avoid `__gzt` in the name of each internal (i.e. private) function and variable, we make use of the `@@` place holder provided by the `l3docstrip` package.

```

335 <@@=gzt>

```

## 2.2 L<sup>A</sup>T<sub>E</sub>X3 loading

For debugging purpose, `expl3` package could be loaded with its `check-declarations` option.

```

336 % \PassOptionsToPackage{check-declarations}{expl3}
337 \RequirePackage{l3keys2e}

```

This `gzt` class will make use of the `expl3` programming interface (L<sup>A</sup>T<sub>E</sub>X3). In order to load this package, it is enough to load the `xparse` package which is anyway needed to produce document-level commands.

```
338 \RequirePackage{xparse}
```

The `gzt` class is declared in the L<sup>A</sup>T<sub>E</sub>X3's way.

```
339 \ProvidesExplClass
340 <class> {gzt}
341 <class-article> {gztarticle}
342 {\gztfiledate}
343 {\gztfileversion}
344 {
345     SMF~ class~ for~ the~ French~ journal^^J
346     "La~ Gazette~ de~ la~ Soci'et'e~ Math'ematique~ de~ France".
347 <class-article>~ (Author~ version.)
348 }
```

The needed T<sub>E</sub>X format is specified.

```
349 \NeedsTeXFormat{LaTeX2e}
```

## 2.3 Class loading

```
350 \bool_new:N \g__gzt_moral_report_bool
351 \bool_new:N \g__gzt_special_edition_bool
352 \bool_new:N \g__gzt_for_authors_bool
353 \bool_new:N \g__gzt_for_printer_bool
354 \bool_new:N \g__gzt_cover_bool
355 \bool_new:N \g__gzt_coverpage_bool
356 \bool_new:N \g__gzt_inside_pages_bool
357 %
358 \bool_new:N \g__gzt_no_inside_backcover_bool
359 <class-article>\bool_gset_true:N \g__gzt_for_authors_bool
360 <class-article>\bool_gset_true:N \g__gzt_inside_pages_bool
```

We define some common code to the `moralreport` global option of `gzt` and `gztarticle`.

```
361 \tl_gset:Nn \g__gzt_moral_report_common_option_tl {
```

```

362 \AddToHook{begindocument/before} {
363   \bool_gset_true:N \g__gzt_moral_report_bool
364   \bool_gset_true:N \g__gzt_frontcover_without_minitoc_bool
365   \title[short={\bfseries\c__gzt_moralreport_rubric_string_tl}]{ }
366   \tl_gset:Nn \g__gzt_rubric_title_tl {
367     \c__gzt_moralreport_rubric_string_tl
368   }
369 }
370 }
371 \
```

`\c__gzt_pagegrid_dim` We declare the constant dimension of the pagegrid, when enabled.

```

373 \dim_const:Nn \c__gzt_pagegrid_dim { 1mm}
```

*(End definition for \c\_\_gzt\_pagegrid\_dim.)*

We define some class options:

- **pagegrid** in order to draw a grid on each page, in order to check the layout (mostly for debugging purpose),
- ...

```

374 \tl_gset:Nn \g__gzt_frontcover_image_file_tl {
375   \c__gzt_issue_frontcover_default_image_file_tl
376 }
377 \tl_gset:Nn \g__gzt_special_edition_color_tl {
378   __gzt_default_cover_color
379 }
380 \clist_new:N \g__gzt_special_edition_logos_clist
381 %
382 \keys_define:nn { gzt }
383 {
384   pagegrid .dim_gset:N = \g__gzt_pagegrid_dim,
385   pagegrid .default:n = {\c__gzt_pagegrid_dim},
386   forauthors .code:n = {
387     \bool_gset_true:N \g__gzt_for_authors_bool
```

```

388     \bool_gset_true:N \g__gzt_inside_pages_bool
389 },
390 forprinter .bool_gset:N = \g__gzt_for_printer_bool,
391 frontcoverimagefile .tl_gset:N = \g__gzt_frontcover_image_file_tl,
392 frontcoverimagefile .default:n = {frontcover},
393 output .choice:,
394 output / frontcover .code:n = {
395     \bool_gset_true:N \g__gzt_for_printer_bool
396     \bool_gset_true:N \g__gzt_cover_bool
397 },
398 output / coverpage .code:n = {
399     \bool_gset_true:N \g__gzt_coverpage_bool
400 },
401 output / insidepages .code:n = {
402     \bool_gset_true:N \g__gzt_for_printer_bool
403     \bool_gset_true:N \g__gzt_inside_pages_bool
404 },
405 output / backcover .code:n = {
406     \bool_gset_true:N \g__gzt_for_printer_bool
407 },
408 output / web .code:n = {
409 },
410 specialedition .code:n = {
411     \bool_gset_true:N \g__gzt_special_edition_bool
412     \bool_gset_true:N \g__gzt_frontcover_without_minitoc_bool
413     \keys_set:nn { gzt / specialedition } {#1}
414 },
415 specialedition / color .code:n = {
416     \tl_gset:Nn \g__gzt_special_edition_color_tl {#1}
417 },
418 specialedition / minitoc .code:n = {
419     \bool_gset_false:N \g__gzt_frontcover_without_minitoc_bool
420 },
421 specialedition / logos .code:n = {
422     \clist_gset:Nn \g__gzt_special_edition_logos_clist {#1}
423 },
424 specialedition / backcover~ image .code:n = {
425     \tl_gset:Nn \g__gzt_special_edition_backcover_image_tl {#1}

```

```

426 },
427 specialedition / title .code:n = {
428   \tl_gset:Nn \g__gzt_special_edition_title_tl {#1}
429 },
430 specialedition / short~ title .code:n = {
431   \tl_gset:Nn \g__gzt_special_edition_short_title_tl {#1}
432 },
433 specialedition / editorial~ heading .code:n = {
434   \tl_gset:Nn \g__gzt_special_edition_editorial_heading_tl {#1}
435 },
436 specialedition / editorial~ author .code:n = {
437   \__gzt_people:nnnnnnn {#1}{}{}{}{}{}{editorinchief}{}
438 },
439 moralreport .code:n = {
440   \g__gzt_moral_report_common_option_tl
441   \AddToHook{begindocument/before} {
442     \tl_gset:Nn \g__gzt_pdftitle_string_tl {
443       \c__gzt_moralreport_rubric_string_tl
444     }
445   }
446 },
447 }
448 </class>
449 <*class-article>
450 \keys_define:nn { gztarticle }
451 {
452   editorial .code:n = {
453     \AddToHook{begindocument}{
454       \__gzt_before_display_editorial:n {}
455     }
456     \AddToHook{enddocument}{
457       \__gzt_after_display_editorial: {}
458     }
459   },
460   presidentmessage .code:n = {

```



```

461 \AddToHook{begindocument}{
462   \_gzt_before_display_presidentmessage: {}
463 }
464 \AddToHook{enddocument}{
465   \_gzt_after_display_presidentmessage: {}
466 }
467 },
468 moralreport .code:n = {
469   \g__gzt_moral_report_common_option_tl
470   \keys_set:nn { gztarticle / moralreport } {#1}
471 },
472 moralreport / title .code:n = {
473   \tl_gset:Nn \g__gzt_moral_report_title_tl {#1}
474 },
475 moralreport / short~ title .code:n = {
476   \tl_gset:Nn \g__gzt_moral_report_short_title_tl {#1}
477 },
478 }
479 </class-article>
480 <*class>

```

If we want to disable the inside backcover.

```

481 % \bool_gset_true:N \g__gzt_no_inside_backcover_bool
482 \ProcessKeysOptions { gzt }
483 </class>
484 <*class | class-article>

```

As subsequent class, the `book` class is loaded, with `openany`, `english` and `french` options.

```

485 \PassOptionsToClass{openany,english,french}{book}
486 \LoadClass { book }
487 \PassOptionsToPackage{table,cmyk}{xcolor}
488 \PassOptionsToPackage{export}{adjustbox}

```

```

489 \PassOptionsToPackage{english,french}{translator}
490 \PassOptionsToPackage{english,french}{babel}
491 \PassOptionsToPackage{english,french}{varioref}
492 \PassOptionsToPackage{english,french}{cleveref}

```

## 2.4 Packages loading

Many of the `gzt` class features are provided by third party packages. In this section, we load them and outline their features interesting from the `gzt` class point of view.<sup>1</sup>

1. Compile  $\TeX$  pictures stand-alone or as part of a document:

```

493 \RequirePackage[group=false]{standalone}

```

2. Tools to load and manipulate data:

```

494 \RequirePackage{datatool}

```

3. In case of pdf $\TeX$  engine, we enforce `fontenc` to be loaded with its `T1` option (usual for French and English documents) and `inputenc` to be loaded with its `utf8` option. Otherwise `fontspec`, convenient for both X $\LaTeX$  and Lua $\LaTeX$ , is loaded, with ligatures à la  $\TeX$  by default enabled.

```

495 \sys_if_engine_pdftex:TF
496 {
497   \RequirePackage[T1]{fontenc}
498   \RequirePackage[utf8]{inputenc}
499 }{
500   \RequirePackage{fontspec}
501 }

```

Load of main font to be used:

```

502 \RequirePackage[sfmath,noDcommand]{kpfonts}

```

4. Formatting both header and footers (`pagestyle`), and sections headers:

```

503 \RequirePackage[pagestyles]{titlesec}

```

---

<sup>1</sup>TODO: When possible, the list of loaded packages should be split into two lists: one of the packages needed just by *Gazette* (for both its logic and its layout) and one of packages useful for the end user.

5. Multicolumn output:

504 `\RequirePackage{multicol}`

6. Graphics inclusion:

505 `\RequirePackage{graphicx}`

7. Establish input relative to a directory:

506 `<class>\RequirePackage{import}`

8. Allow tables to flow over page boundaries:

507 `\RequirePackage{longtable}`

9. Put a grey textual watermark on document pages (loaded only if `forauthors` *Gazette*'s option is on):

508 `<class>\bool_if:nT { \g__gzt_for_authors_bool } {`  
509 `<class> \RequirePackage{draftwatermark}[2006/06/30]`  
510 `<class>}`

10. Graphics package-alike macros for “general” boxes:

511 `\RequirePackage{adjustbox}`

11. Packages and image files for MWEs (used in case of missing pictograms):

512 `\RequirePackage{mwe}`

12. A new reference scheme for L<sup>A</sup>T<sub>E</sub>X, giving the total number of pages in the document:

513 `\RequirePackage{zref-totpages}`

13. Reference last page number (which is generally different from the total number of pages in the document):

514 `<class>\RequirePackage{lastpage}`

14. A new reference scheme for L<sup>A</sup>T<sub>E</sub>X, providing the facilities of the `xr` and `xr-hyper` packages:

515 `\RequirePackage{zref-xr}`

15. Alternative versions of `ragged`-type commands:

516 `\RequirePackage{ragged2e}`

16. Define commands that appear not to eat spaces:

```
517 \RequirePackage{xspace}
```

17. ...:

```
518 \RequirePackage{textcase}
```

18. For typesetting epigraphs:

```
519 \RequirePackage{epigraph}
```

19. Context sensitive quotation facilities:

```
520 \RequirePackage[autostyle]{csquotes}
```

20. Programmable bibliographies and citations:

```
521 \RequirePackage[
522   datamodel=gzt,
523   defernumbers=true,
524   autolang=other
525 ]{biblatex}
526 \ifpackagelater{biblatex}{2016/01/01}{
527   \ExecuteBibliographyOptions{giveninits}
528 }{
529   \ExecuteBibliographyOptions{firstinits}
530 }
```

21. Extended implementation of the  $\LaTeX$  array and tabular-environments:

```
531 \RequirePackage{array}
```

22. Publication quality tables in  $\LaTeX$ :

```
532 \RequirePackage{booktabs}
```

23. Tabulars with adjustable-width columns:

```
533 \RequirePackage{tabularx}
```

24. Set of tools for authors to typeset quantities in a consistent way (automated processing of numbers and units, and control of tabular alignment of numbers):

```
534 % \RequirePackage{siunitx}
```

- 535        %
25. Modify skips between paragraphs:
- 536        `\RequirePackage{nccparskip}`
26. Construction for table cells that span more than one row of the table:
- 537        `\RequirePackage{multirow}`
27. Intelligent page references:
- 538        `\RequirePackage{varioref}`
28. Extension to `amsmath` package: correct various bugs/defeciencies in `amsmath` and useful tools for mathematical typesetting<sup>2</sup>:
- 539        `\RequirePackage{mathtools}`
29. Support for using RSFS fonts in maths:
- 540        `\RequirePackage{rsfso}`
30. Vector arrows:
- 541        `\RequirePackage{esvect}`
31. Hooks to do actions on every page or on the current page:
- 542        % `\RequirePackage{everypage}`
32. For translating words in L<sup>A</sup>T<sub>E</sub>X.
- 543        `\RequirePackage{translator}`
33. Flexible and easy interface to page dimensions:
- 544        `\RequirePackage{geometry}`
34. Bilingual (French and English) documents, with French as default language:
- 545        `\RequirePackage{babel}`
35. METAFONT and macros for Euro sign:
- 546        `\RequirePackage{eurosym}`

---

<sup>2</sup>The `mathtools` package loads `amsmath`, hence it's not necessary to load the latter.

Expandable checks for the current language:

547 `\RequirePackage{iflang}[2007/11/11]`

36. Tagging tables of contents:

548 `\RequirePackage{tableof}`

37. Completely customisable TOCs:

549 `\RequirePackage{etoc}`

38. Subliminal refinements towards typographical perfection:

550 `\RequirePackage[babel=true]{microtype}`

39. Current date and time formatting:

551 `\RequirePackage[nodayofweek]{datetime}`

40. Customization of lists:

552 `\RequirePackage[inline]{enumitem}`

41. Execute command after the next page break:

553 `\RequirePackage{afterpage}`

42. Extension of L<sup>A</sup>T<sub>E</sub>X's color facilities:

554 `\RequirePackage{xcolor}`

43. We need to avoid some macros from few of the following packages to be added to `\@preamblecmds`:

555 `\(class|class-article)\cs_set_eq:NN \_gzt_orig_preamblecmds \@preamblecmds`

Create PostScript and PDF graphics in T<sub>E</sub>X:

556 `\RequirePackage{tikz}`

Create normal/logarithmic plots in two and three dimensions:

557 `\RequirePackage{pgfplots}`

44. Environments for colored and framed text boxes, e.g. theorems:

558 `\RequirePackage{tcolorbox}`

45. A single TikZ node for the whole page:

```
559 \RequirePackage{tikzpagenodes}
```

46. Print page grid in background:

```
560 <class>\RequirePackage[foreground]{pagegrid}
```

47. Typesetting theorems (AMS style):

```
561 \RequirePackage{amsthm}
```

48. Extensions to theorem environments:

```
562 \RequirePackage{thmtools}
```

We restore `\@preamblecmds` as it was before:

```
563 <class | class-article>\cs_set_eq:NN \@preamblecmds \__gzt_orig_preamblecmds
```

49. Control float placement:

```
564 \RequirePackage{placeins}
```

50. Hypertext marks:

```
565 \RequirePackage[hidelinks,hyper texnames=false]{hyperref}
```

51. A new bookmark (outline) organization for `hyperref` package:

```
566 \RequirePackage[numbered]{bookmark}
```

52. Create glossaries and lists of acronyms:

```
567 \RequirePackage[nowarn]{glossaries}
```

53. Intelligent cross-referencing:

```
568 \RequirePackage{cleveref}
```

Settings of the glossaries and acronyms.

```
569 \makeglossaries
```

```
570 \setglossarystyle{indexhypergroup}
```

```
571 \setacronymstyle{long-sc-short}
```

In case of pdf<sub>T</sub><sub>E</sub>X engine, the document is by default in sans serif and makes use of the `lmodern` for the “`ttfamily`” font.

```
572 \sys_if_engine_pdftex:T
573 {
574   \renewcommand\familydefault{\sfdefault}
575   \renewcommand{\ttdefault}{\lmtt}
576 }
```

## 2.5 Miscellaneous patches

We pop some commands from the `\@preamblecmds` list in order to allow `\DeclareMathOperator` to be used after the preamble (see <https://tex.stackexchange.com/q/223421/18401>).

```
577 \tl_remove_all:Nn \@preamblecmds { \do \DeclareMathOperator }
578 \tl_remove_all:Nn \@preamblecmds { \do \newacronym }
579 \tl_remove_all:Nn \@preamblecmds { \do \@declmathop }
580 \tl_remove_all:Nn \@preamblecmds { \do \usetikzlibrary }
```

## 2.6 Messages

In this section, some messages are declared for future use.

```
581 \msg_new:nnnn{gzt}{issue-number-needed}{Option~ `#1'~ needed!}
582   {Please~ specify~ `#1=<number>',
583    ~ otherwise~ `<number>'~ will~ be~ set~ to
584    ~ `~\int_use:N\c__gzt_first_issue_number_int'.}
585 \msg_new:nnnn{gzt}{unknown-choice}{Choice~ `#3'~ invalid!}
586   {Please~ specify~ #1=#2.}
587 <class>\msg_new:nnnn{gzt}{configuration-file-missing}{File~ `~\c__gzt_configuration_file_string_tl'~ missing!}
588 <class> {The~ whole~ issue~ may~ not~ be~ conform~ if~ `~\c__gzt_configuration_file_string_tl'~ is~ missing.}
589 <class>\msg_new:nnnn{gzt}{editorial-file-missing}{File~ `~\c__gzt_editorial_file_string_tl'~ missing!}
590 <class> {The~ whole~ issue~ requires~ the~ `~\c__gzt_editorial_file_string_tl'~ file.}
```

## 2.7 Counters

In this section, we define some counters for future use.



`\g__gzt_editors_in_chief_int`    The integer `\g__@_editors_in_chief_int` will count the number of editors in chief in order to use singular or plural form of the corresponding string “Rédacteur(s) en chef”.

`\g__gzt_articles_int`  
`\g__gzt_questions_answers_int`

```
591 \int_new:N \g__gzt_editors_in_chief_int
```

The integer `\g__@_item_in_rubric_int` will count the number of item in a rubric in order to give a specific behavior of the first of them.

```
592 \int_new:N \g__gzt_item_in_rubric_int
```

The integer `\g__@_articles_int` will count the number of articles in order to provide for each of them a unique bibliographic key.

```
593 \int_new:N \g__gzt_articles_int
```

The integer `\g__@_question_int` will count the number of questions (and hence of answers) in order to provide distinguish between the first and the subsequent questions/answers of an interview, the former being likely to be typeset differently (e.g. the names of the interviewer and the interviewee may appear only in the first question/answer).

```
594 \int_new:N \g__gzt_question_int
```

*(End definition for `\g__gzt_editors_in_chief_int`, `\g__gzt_articles_int`, and `\g__gzt_questions_answers_int`.)*

## 2.8 Constants

In this section, we declared some constants for future use.

### 2.8.1 Integers

#### Issue numbers

`\c__gzt_first_issue_number_int`    The first issue number, month and year, and the interval (in months) between two consecutive issues, are declared.

`\c__gzt_first_issue_year_int`  
`\c__gzt_first_issue_month_int`  
`\c__gzt_interval_in_months_int`

```
595 \int_const:Nn \c__gzt_first_issue_number_int { 143 }
```

```
596 \int_const:Nn \c__gzt_first_issue_year_int { 2015 }
```

```
597 \int_const:Nn \c__gzt_first_issue_month_int { 1 }
```

```
598 \int_const:Nn \c__gzt_interval_in_months_int { 3 }
```

*(End definition for `\c__gzt_first_issue_number_int` and others.)*

## 2.8.2 Strings and keywords

We now declare some private string constants.

For the journal's short and long titles.

```
\c_gzt_journal_short_title_string_tl
\c_gzt_journal_title_string_tl
\c_gzt_editors_in_chief_string_tl
\c_gzt_editors_string_tl
\c_gzt_editorial_board_string_tl
\c_gzt_editorial_secretariat_string_tl
\c_gzt_phone_string_tl
\c_gzt_fax_string_tl
\c_gzt_informations_string_tl
\c_gzt_publishingdirector_string_tl
\c_gzt_issn_string_tl
\c_gzt_isbn_string_tl
\c_gzt_latexclass_string_tl
\c_gzt_font_string_tl
\c_gzt_configuration_file_string_tl
\c_gzt_cover_string_tl
\c_gzt_artistic_director_string_tl
\c_gzt_editorial_heading_string_tl
\c_gzt_toc_string_tl
\c_gzt_message_string_tl
\c_gzt_president_signatory_string_tl
\c_gzt_editorinchief_signatory_string_tl
\c_gzt_issue_bib_file_tl
\c_gzt_about_frontcover_string_tl
\c_gzt_credit_frontcover_string_tl
\c_gzt_authors_instructions_string_tl
```

```
599 \tl_const:Nn \c_gzt_journal_short_title_string_tl {Gazette}
600 \tl_const:Nn \c_gzt_journal_title_string_tl {
601   \c_gzt_journal_short_title_string_tl}~ de~ la~ Soci\et\e~ Math\ematique~ de~ France
602 }
```

For the names of the underlying classes.

```
603 \tl_const:Nn \c_gzt_class_name_tl {gzt}
604 \tl_const:Nn \c_gzt_article_class_name_tl {gztarticle}
```

For the editor(s) in chief.

```
605 \tl_const:Nn \c_gzt_editors_in_chief_string_tl
606 {
607   \int_compare:nNnTF { \g_gzt_editors_in_chief_int } > { 1 }
608   { \c_gzt_editorsinchief_string_tl }
609   { \c_gzt_editorinchief_string_tl }
610 }
```

For the editor in chief.

```
611 \tl_const:Nn \c_gzt_editorinchief_string_tl {R\edacteur~ en~ chef }
```

For the editors in chief (plural form of the previous one).

```
612 \tl_const:Nn \c_gzt_editorsinchief_string_tl {R\edacteurs~ en~ chef }
```

For the editors.

```
613 \tl_const:Nn \c_gzt_editors_string_tl {R\edacteurs }
```

For the editorial board.

```
614 \tl_const:Nn \c_gzt_editorial_board_string_tl {Comit\e~ de~ r\edaction}
```

For the editorial board of special edition.

```
615 \tl_const:Nn \c_gzt_special_edition_editorial_board_string_tl {  
616   Num\ 'ero~ sp\ 'ecial~ de~ la~ Gazette~ de~ la~ Soci\ 'et\ 'e~ Math\ 'ematique~ de~  
617   France~ sous~ la~ direction~ de~ :  
618 }
```

For the editorial\_secretariat.

```
619 \tl_const:Nn \c_gzt_editorial_secretariat_string_tl {Secr\ 'etariat~ de~ r\ 'edaction}
```

For the phone.

```
620 \tl_const:Nn \c_gzt_phone_string_tl {T\ 'el.}
```

For the fax.

```
621 \tl_const:Nn \c_gzt_fax_string_tl {Fax}
```

For the informations.

```
622 \tl_const:Nn \c_gzt_informations_string_tl {Renseignements}
```

For the publishing director.

```
623 \tl_const:Nn \c_gzt_publishingdirector_string_tl {Directeur~ de~ la~ publication}
```

For the ISSN.

```
624 \tl_const:Nn \c_gzt_issn_string_tl {\textsc{issn}}
```

For the ISBN.

```
625 \tl_const:Nn \c_gzt_isbn_string_tl {\textsc{isbn}}
```

For \LaTeX Class.

```
626 \tl_const:Nn \c_gzt_latexclass_string_tl {Classe~ \LaTeX{}}
```

For Impression.

```
627 \tl_const:Nn \c__gzt_printer_string_tl {Impression}
```

For configuration file.

```
628 \tl_const:Nn \c__gzt_configuration_file_string_tl {gzt.cfg}
```

For the artistic director.

```
629 \tl_const:Nn \c__gzt_artistic_director_string_tl {Conception~ graphique}
```

For the editorial.

```
630 \AddToHook{begindocument/before}{  
631   \bool_if:NTF {\g__gzt_special_edition_bool} {  
632     \tl_const:Nn \c__gzt_editorial_heading_string_tl {Avant-propos}  
633   }{  
634     \tl_const:Nn \c__gzt_editorial_heading_string_tl {\'Editorial}  
635   }  
636 }
```

For the editor in chief.

```
637 \tl_const:Nn \c__gzt_editorinchief_signatory_string_tl {  
638   \c__gzt_editorinchief_string_tl~ de~ la~ \c__gzt_journal_title_string_tl  
639 }
```

For the table of contents.

```
640 \tl_const:Nn \c__gzt_toc_string_tl {Sommaire}
```

For the president message.

```
641 \tl_const:Nn \c__gzt_president_message_string_tl {Mot~ du~ pr\'esident}
```

For the president.

```
642 \tl_const:Nn \c__gzt_president_signatory_string_tl {pr\'esident~ de~ la~ \g__gzt_smf_short_string_tl}
```

For the date of the editor in chief's message.

```
643 \tl_const:Nn \c__gzt_editorinchief_message_date_string_tl {Le~ \displaydate{__gzt_editorinchief_message_date}}
```

For the date of the president's message.

```
644 \tl_const:Nn \c__gzt_president_message_date_string_tl {Le~ }
```

For the special editions.

```
645 \tl_const:Nn \c__gzt_special_edition_string_tl {\c_space_tl}\sp{\'e}cial}
646 \tl_const:Nn \c__gzt_long_special_edition_string_tl {Numéro\c__gzt_special_edition_string_tl}
647 \tl_const:Nn \c__gzt_short_special_edition_string_tl {\No{ }\c__gzt_special_edition_string_tl}
```

For the front cover header text.

```
648 \AddToHook{begindocument/before}{
649   \tl_const:Nn \c__gzt_frontcover_header_string_tl {
650     \bool_if:NT {\g__gzt_special_edition_bool} {
651       \text_uppercase:n {\c__gzt_long_special_edition_string_tl}
652       \medskip
653       \par
654       \normalsize
655     }
656     \l__gzt_uppercased_date_format\displaydate{__gzt_date}
657     \bool_if:NF {\g__gzt_special_edition_bool} {
658       \c_space_tl
659       \textendash{}
660       \c_space_tl
661       \No
662       \int_use:N\g__gzt_issue_number_int
663     }
664   }
665 }
```

For the graphics extensions.

```
666 \clist_const:Nn \c__gzt_graphics_extensions_clist {png,PNG,jpg,JPG,jpeg,JPEG,pdf,PDF}
```

For the pdftitle text.

```
667 \tl_const:Nn \c__gzt_pdftitle_string_tl {
668   \bool_if:NTF {\g__gzt_moral_report_bool} {
669     \c__gzt_moralreport_rubric_string_tl
670   }{
671     \c__gzt_journal_title_string_tl
672     % \c_space_tl
673     % \textendash{}
674     % \c_space_tl
675     % \l__gzt_uppercased_date_format{\displaydate{\__gzt_date}}
676     \c_space_tl
677     \textendash{}
678     \c_space_tl
679     N°
680   \bool_if:NTF {\g__gzt_special_edition_bool} {
681     \c__gzt_special_edition_string_tl
682     \c_space_tl
683     \g__gzt_special_edition_title_tl
684   }{
685     \int_use:N\g__gzt_issue_number_int
686   }
687 }
688 }
```

For the name of the directory containing the editorial and the president message.

```
689 \tl_const:Nn \c__gzt_frontmatter_directory_string_tl {frontmatter}
```

For the name of the directory containing the 3rd and 4th cover pages.

```
690 \tl_const:Nn \c__gzt_backmatter_directory_string_tl {backmatter}
```

For the name of the file containing the editorial.

```
691 \tl_const:Nn \c__gzt_editorial_file_string_tl {\c__gzt_frontmatter_directory_string_tl/editorial}
```

For the name of the file containing the president message.

```
692 \tl_const:Nn \c__gzt_president_message_file_string_tl {\c__gzt_frontmatter_directory_string_tl/presidentmessage}
```

For the path to the current issue's directory.

```
693 \tl_const:Nn \c__gzt_issue_path_string_tl {\int_use:N \g__gzt_issue_number_int}
```

For the name and path of the images directory.

```
694 \tl_const:Nn \c__gzt_images_directory_string_tl {images}
695 \tl_const:Nn \c__gzt_issue_images_path_string_tl {
696   \c__gzt_images_directory_string_tl}
```

For the name of the file containing the image of the current issue's front cover.

```
697 \tl_const:Nn \c__gzt_issue_frontcover_default_image_file_tl {frontcover}
```

For the name of the file containing the text of the current issue's back cover.

```
698 \tl_const:Nn \c__gzt_issue_backcover_text_file_string_tl {backcover}
699 \tl_const:Nn \c__gzt_backcover_page_file_string_tl {
700   \c__gzt_backmatter_directory_string_tl/\c__gzt_issue_backcover_text_file_string_tl
701 }
```

For the name of the file containing the text of the special issue's abstract back cover.

```
702 \tl_const:Nn \c__gzt_special_edition_backcover_text_file_string_tl {abstract_backcover}
703 \tl_const:Nn \c__gzt_special_edition_backcover_page_file_string_tl {
704   \c__gzt_backmatter_directory_string_tl/\c__gzt_special_edition_backcover_text_file_string_tl
705 }
```

For the name of the file of the special issue's picture back cover.

```
706 \tl_const:Nn \c__gzt_special_edition_backcover_picture_string_tl {picture_backcover}
707 \tl_const:Nn \c__gzt_special_edition_backcover_page_picture_string_tl {
708   \c__gzt_backmatter_directory_string_tl/\c__gzt_special_edition_backcover_picture_string_tl
709 }
```

For the name of the file containing the acronyms.

```
710 \tl_const:Nn \c__gzt_acronyms_file_string_tl {\c__gzt_class_name_tl acronyms}
```

For authors' instructions file.

```
711 \tl_const:Nn \c_gzt_authors_instructions_file_extension_tl {ain}
712 \tl_const:Nn \c_gzt_authors_instructions_file_tl {\c_sys_jobname_str.\c_gzt_authors_instructions_file_extension_tl}
```

For the few words about the front cover.

```
713 \tl_const:Nn \c_gzt_about_frontcover_string_tl {\`A propos de la couverture.}
```

For the credit of the front cover.

```
714 \tl_const:Nn \c_gzt_credit_frontcover_string_tl {cr'edit}
```

For the authors instructions.

```
715 \tl_const:Nn \c_gzt_authors_instructions_string_tl {Instructions aux auteurs}
```

For the preliminary versions sent to authors for checking.

```
716 \tl_const:Nn \c_gzt_preliminary_version_string_tl {
717 Ce document est une {\e}preuve vous permettant de contr{\o}ler l'int{\e}grit{\e} du
718 texte d'origine (et de la bibliographie s'il y en a une) de votre article
719 {\a} para{\i}tre dans le prochain num{\e}ro de la \gzt*{.} La mise en page
720 actuelle n'est pas d{\e}finitive\,:~ votre article pourra en particulier ne pas
721 d{\e}buter en haut d'une page.
722 }
```

For the string that precedes the title in the “Tell me” rubric.

```
723 \tl_const:Nn \c_gzt_tellme_extra_title_string_tl {...\c_space_tl}
```

For the separator between a rubric and an article's title in the minitoc.

```
724 \tl_const:Nn \c_gzt_minitoc_rubric_title_separator_string_tl {\c_space_tl\textendash}
```

Names of the pictogram files.

```
725 \tl_const:Nn \c_gzt_mathematics_pictogram_file_name_tl {picto-mathematics}
726 \tl_const:Nn \c_gzt_dossier_pictogram_file_name_tl {picto-dossier}
727 \tl_const:Nn \c_gzt_community_pictogram_file_name_tl {picto-hands}
```



```

728 \tl_const:Nn \c__gzt_interview_pictogram_file_name_tl {picto-interview}
729 \tl_const:Nn \c__gzt_teaching_pictogram_file_name_tl {picto-teaching}
730 \tl_const:Nn \c__gzt_parity_pictogram_file_name_tl {picto-parity}
731 \tl_const:Nn \c__gzt_tellme_pictogram_file_name_tl {picto-tellme}
732 \tl_const:Nn \c__gzt_information_pictogram_file_name_tl {picto-information}
733 \tl_const:Nn \c__gzt_rearviewmirror_pictogram_file_name_tl {picto-rearviewmirror}
734 \tl_const:Nn \c__gzt_tribute_pictogram_file_name_tl {picto-tribute}
735 \tl_const:Nn \c__gzt_books_pictogram_file_name_tl {picto-books}
736 \tl_const:Nn \c__gzt_forum_pictogram_file_name_tl {picto-forum}

```

For the miscellaneous rubrics.

```

737 \tl_const:Nn \c__gzt_mathematics_rubric_string_tl {Math\`ematiques}
738 \tl_const:Nn \c__gzt_dossier_rubric_string_tl {Dossier}
739 \tl_const:Nn \c__gzt_community_rubric_string_tl {Vie~ de~ la~ communaut\`e}
740 \tl_const:Nn \c__gzt_interview_rubric_string_tl {Entretien}
741 \tl_const:Nn \c__gzt_teaching_rubric_string_tl {Diffusion~ des~ savoirs}
742 \tl_const:Nn \c__gzt_parity_rubric_string_tl {Parit\`e}
743 \tl_const:Nn \c__gzt_tellme_rubric_string_tl {Raconte-moi}
744 \tl_const:Nn \c__gzt_information_rubric_string_tl {Information}
745 \tl_const:Nn \c__gzt_rearviewmirror_rubric_string_tl {R\`etroviseur}
746 \tl_const:Nn \c__gzt_tribute_rubric_string_tl {Carnet}
747 % \tl_const:Nn \c__gzt_books_rubric_string_tl {Recension}
748 \tl_const:Nn \c__gzt_books_rubric_string_tl {Livres}
749 \tl_const:Nn \c__gzt_latex_rubric_string_tl {Astuces~ \LaTeX{}}
750 \tl_const:Nn \c__gzt_forum_rubric_string_tl {Tribune~ libre}
751 \tl_const:Nn \c__gzt_published_with_help_of_string_tl {Publi\`e~ avec~ le~ concours~ de~ :}
752 \tl_const:Nn \c__gzt_advertisement_directory_string_tl {advertisement/}
753 \tl_const:Nn \c__gzt_advertisement_string_tl {Publicit\`e}
754 \tl_const:Nn \c__gzt_moralreport_rubric_string_tl {Rapport~ moral}

```

*(End definition for \c\_\_gzt\_journal\_short\_title\_string\_tl and others.)*

For the long and short forms of SMF.

```

755 \tl_const:Nn \c__gzt_smf_short_string_tl {\textsc{smf}}
756 \tl_const:Nn \c__gzt_smf_short_pdf_string_tl {SMF}
757 \tl_const:Nn \c__gzt_smf_string_tl {Soci\`et\`e~ Math\`ematique~ de~ France}

```

For the long and short forms of “c’est-à-dire” and “C’est-à-dire” (“that is” and “That is”).

```
758 \tl_const:Nn \c__gzt_cad_short_string_tl {c.-\`a-d.}
759 \tl_const:Nn \c__gzt_cad_string_tl {c'est-\`a-dire}
760 \tl_const:Nn \c__gzt_Cad_short_string_tl {C.-\`a-d.}
761 \tl_const:Nn \c__gzt_Cad_string_tl {C'est-\`a-dire}
```

For the footer text.

```
762 \tl_const:Nn \c__gzt_footer_string_tl {
763   \c__gzt_footer_size_font_tl
764   \textcolor{__gzt_smf_number_color}{\text_uppercase:n {\c__gzt_smf_short_string_tl}}
765   \c_space_tl
766   \textcolor{__gzt_date_color}{
767     \textendash{ }\c_space_tl
768     \bool_if:NTF {\g__gzt_moral_report_bool} {
769       \text_uppercase:n { \c__gzt_moralreport_rubric_string_tl }
770     }{
771       \text_uppercase:n {\c__gzt_journal_short_title_string_tl}
772       \bool_if:nF {
773         \g__gzt_inside_frontcover_bool || \g__gzt_backmatter_bool ||
774         {\int_compare_p:nNn {\g__gzt_issue_number_int}={0}}
775       }{
776         \c_space_tl\textendash{ }\c_space_tl
777         \l__gzt_uppercased_date_format\displaydate{__gzt_date}
778         \bool_if:NF {\g__gzt_special_edition_bool} {
779           \c_space_tl
780           \textendash{ }\c_space_tl
781           \textcolor{__gzt_smf_number_color}{\No\int_use:N\g__gzt_issue_number_int}
782         }
783       }
784     }
785   }
786 }
```

For the name of the file containing the SMF logo.

```
787 \file_if_exist:nTF { logo_SMF.pdf }{
788   \tl_const:Nn \c__gzt_smf_logo_file_string_tl {logo_SMF}
```

```

789   }{
790   \tl_const:Nn \c__gzt_smf_logo_file_string_tl {example-image}
791   }

```

For the name of the file containing the bibliography of the current issue.

```

792 % \tl_const:Nn \c__gzt_issue_bib_file_string_tl {issue-\c_sys_jobname_str.bib}
793 \tl_const:Nn \c__gzt_issue_bib_file_suffix_string_tl {__gzt}
794 \tl_const:Nn \c__gzt_issue_bib_file_string_tl {\c_sys_jobname_str\c__gzt_issue_bib_file_suffix_string_tl.bib}
795 \tl_const:Nn \c__gzt_issue_bib_path_string_tl {\c__gzt_issue_bib_file_string_tl}

```

For the prefix of the bibliographic key of each article.

```

796 \bool_if:NTF {\g__gzt_special_edition_bool} {
797   \tl_const:Nn \c__gzt_issue_bib_key_tl {special-edition}
798 }{
799   \tl_const:Nn \c__gzt_issue_bib_key_tl {\int_use:N \g__gzt_issue_number_int}
800 }

```

For the interview title.

```

801 \tl_const:Nn \c__gzt_interview_title_string_tl {En~ apart\ 'e~ avec~ }

```

For the asides opening and eventually closing punctuation marks.

```

802 \tl_const:Nn \c__gzt_aside_string_tl {--}

```

For the draft watermark.

```

803 \tl_const:Nn \c__gzt_draftwatermark_string_tl {draft}

```

For the text accompanying the date displayed in the footer of the authors' versions.

```

804 \tl_const:Nn \c__gzt_compiled_string_tl {
805   \int_compare:nNnT {\g__gzt_issue_number_int}={0} {
806     \c__gzt_footer_size_font_tl
807     \IfLanguageName{french}{
808       Compil\ 'e~ le~
809     }{
810       Compiled~ on~

```

```

811     }
812     \today
813   }
814 }

```

```

smf
issn
isbn 815 % \newacronym{smf}{smf}{\c_gzt_smf_string_tl}
      816 % \newacronym{issn}{issn}{International Standard Serial Number}
cv    817 % \newacronym{isbn}{isbn}{International Standard Book Number}
      818 % \newacronym{cv}{cv}{curriculum vit\ae}

```

*(End definition for smf and others. These functions are documented on page ??.)*

### 2.8.3 Booleans

We now declare the booleans that will be used.

The following booleans will be used to test wheter we are respectively in the front cover, in the inside front cover, in the frontmatter, in (first page of) a rubric, in the mainmatter.

```

\g__gzt_frontcover_bool 819 \bool_new:N \g__gzt_frontcover_bool
\g__gzt_inside_frontcover_bool 820 \bool_new:N \g__gzt_inside_frontcover_bool
\g__gzt_inside_backcover_bool 821 \bool_new:N \g__gzt_inside_backcover_bool
\g__gzt_frontmatter_bool 822 \bool_new:N \g__gzt_frontmatter_bool
\g__gzt_rubric_bool 823 \bool_new:N \g__gzt_rubric_bool
\g__gzt_interview_rubric_bool 824 \bool_new:N \g__gzt_interview_rubric_bool
\g__gzt_mainmatter_bool 825 \bool_new:N \g__gzt_tellme_rubric_bool
\g__gzt_backmatter_bool 826 \bool_new:N \g__gzt_rearviewmirror_rubric_bool
\g__gzt_backcover_bool 827 \bool_new:N \g__gzt_books_rubric_bool
828 \bool_new:N \g__gzt_mainmatter_bool
829 \bool_new:N \g__gzt_backmatter_bool
830 \bool_new:N \g__gzt_backcover_bool
831 \bool_new:N \g__gzt_frontcover_without_minitoc_bool

```

*(End definition for \g\_\_gzt\_frontcover\_bool and others.)*

`\_article_with_bibliography_or_minibio_bool` The following boolean will be used to test, for a given (not first) article of a rubric, whether the previous article ends with a bibliography or a minibio, in order to adjust the vertical space before its “bullet and rule”.

```
832 \bool_new:N \g__gzt_previous_article_with_bibliography_or_minibio_bool
```

*(End definition for \g\_\_gzt\_previous\_article\_with\_bibliography\_or\_minibio\_bool.)*

`\g__gzt_advertisement_bool` The following boolean will be used to test wheter we are inside an advertisement page.

```
833 \bool_new:N \g__gzt_advertisement_bool
```

*(End definition for \g\_\_gzt\_advertisement\_bool.)*

`\g__gzt_multicols_bool` The following boolean will be used to test wheter we are inside a multicol’s multicols environment.

```
834 \bool_new:N \g__gzt_multicols_bool
```

*(End definition for \g\_\_gzt\_multicols\_bool.)*

`\g__gzt_refsection_bool` The following boolean will be used to test wheter we are inside a biblatex’s refsection environment.

```
835 \bool_new:N \g__gzt_refsection_bool
```

*(End definition for \g\_\_gzt\_refsection\_bool.)*

## 2.8.4 Dimensions

### Geometry of the page

`\c__gzt_rubrics_abstract_width_dim`  
`\_gzt_rubrics_head_text_abstract_width_dim`  
`\_gzt_rubrics_head_text_no_abstract_width_dim`  
`\l__gzt_rubrics_head_text_width_dim` We declare the constant (default) dimensions of the boxes containing the abstract and head text rubrics.

```
836 \dim_const:Nn \c__gzt_rubrics_abstract_width_dim { 85mm}
```

```
837 \dim_const:Nn \c__gzt_rubrics_head_text_abstract_width_dim { 50mm}
```

```
838 \dim_const:Nn \c__gzt_rubrics_head_text_no_abstract_width_dim
```

```
839 { \c__gzt_rubrics_abstract_width_dim + \c__gzt_rubrics_head_text_abstract_width_dim}
```

```
840 \dim_new:N \l__gzt_rubrics_head_text_width_dim
```

*(End definition for \c\_\_gzt\_rubrics\_abstract\_width\_dim and others.)*

```

\c__gzt_offset_dim
\c__gzt_paperheight_dim
\c__gzt_paperwidth_dim
\c__gzt_topmargin_dim
\c__gzt_headsep_dim
\c__gzt_botmargin_dim
\c__gzt_innmargin_dim
\c__gzt_outmargin_dim
\c__gzt_footskip_dim
\c__gzt_header_line_width_dim
\c__gzt_header_line_yshift_dim

```

We first declare the default page layout constant dimensions.

```

841 \dim_const:Nn \c__gzt_layoutheight_dim { 270mm}
842 \dim_const:Nn \c__gzt_layoutwidth_dim { 210mm}

```

We define a “printer” layout offset dimension `\c__gzt_printer_layoutoffset_dim`, fixed by the printer to be 5 mm.

```

843 \dim_const:Nn \c__gzt_printer_layoutoffset_dim { 5mm}

```

We define a “potential” layout offset dimension which is non-zero (and the equal to “printer” layout offset dimension) iff the output is prepared for the printer (`\g__gzt_for_printer_bool` flag equals true).

```

844 \bool_if:NTF {\g__gzt_for_printer_bool} {
845   \dim_const:Nn \c__gzt_potential_layoutoffset_dim { \c__gzt_printer_layoutoffset_dim}
846 }{
847   \dim_const:Nn \c__gzt_potential_layoutoffset_dim {\c_zero_dim}
848 }

```

We define a “printer” binding dimension `\c__gzt_printer_bindingoffset_dim`, fixed by the printer to have different values depending on some total pages thresholds. If the binding dimension is denoted by  $b$  (and expressed in millimeters) and the total page number of the document<sup>3</sup> is denoted by  $N$ , the thresholds are as follows:

$$b = \begin{cases} 0 & \text{si } N < 68 \\ 3 & \text{si } 68 \leq N < 80 \\ 3.5 & \text{si } 80 \leq N < 88 \\ 3.9 & \text{si } 88 \leq N < 96 \\ 4.1 & \text{si } 96 \leq N < 104 \\ 4.5 & \text{si } 104 \leq N < 120 \\ 5 & \text{si } N \geq 120 \end{cases} \quad (1)$$

We define the thresholds:

```

849 \int_const:Nn \c__gzt_thresold_a_int {68}
850 \int_const:Nn \c__gzt_thresold_b_int {80}
851 \int_const:Nn \c__gzt_thresold_c_int {88}

```

---

<sup>3</sup>Except cover pages, that is the “real” total page number minus 4.

```

852 \int_const:Nn \c_gzt_thresold_d_int {96}
853 \int_const:Nn \c_gzt_thresold_e_int {104}
854 \int_const:Nn \c_gzt_thresold_f_int {120}

```

and the corresponding binding dimensions:

```

855 \dim_const:Nn \c_gzt_bindingoffset_a_dim {3mm}
856 \dim_const:Nn \c_gzt_bindingoffset_b_dim {3.5mm}
857 \dim_const:Nn \c_gzt_bindingoffset_c_dim {3.9mm}
858 \dim_const:Nn \c_gzt_bindingoffset_d_dim {4.1mm}
859 \dim_const:Nn \c_gzt_bindingoffset_e_dim {4.5mm}
860 \dim_const:Nn \c_gzt_bindingoffset_f_dim {5mm}

```

In order to know the total pages number of the document (store in `\g_@@_total_page_number_int`), we need first to specify the “external” document whom `.aux` file will be read.

```

861 \int_new:N \g_gzt_total_pages_number_int
862 \int_new:N \g_gzt_total_inside_pages_number_int
863 \zexternaldocument[self]{\jobname}

```

We extract the total pages number thanks to `\zref@extractdefault` from `zref-totpages` package.

```

864 \int_gset:Nn \g_gzt_total_pages_number_int { \zref@extractdefault{selfLastPage}{abspage}{0} }
865 \int_gset:Nn \g_gzt_total_inside_pages_number_int { \g_gzt_total_pages_number_int - 4 }

```

The “printer” binding dimension is now store in `\c_@@_printer_bindingoffset_dim` following eq. (1) on the preceding page.

```

866 \int_compare:nNnTF {\g_gzt_total_inside_pages_number_int}<{\c_gzt_thresold_a_int}
867 {
868   \dim_const:Nn \c_gzt_printer_bindingoffset_dim { \c_zero_dim }
869 }{
870   \int_compare:nNnTF {\g_gzt_total_inside_pages_number_int}<{\c_gzt_thresold_b_int}
871   {
872     \dim_const:Nn \c_gzt_printer_bindingoffset_dim { \c_gzt_bindingoffset_a_dim }
873   }{
874     \int_compare:nNnTF {\g_gzt_total_inside_pages_number_int}<{\c_gzt_thresold_c_int}
875     {
876       \dim_const:Nn \c_gzt_printer_bindingoffset_dim { \c_gzt_bindingoffset_b_dim }
877     }{

```

```

878 \int_compare:nNnTF {\g__gzt_total_inside_pages_number_int}<{\c__gzt_threshold_d_int}
879 {
880   \dim_const:Nn \c__gzt_printer_bindingoffset_dim { \c__gzt_bindingoffset_c_dim }
881 }{
882   \int_compare:nNnTF {\g__gzt_total_inside_pages_number_int}<{\c__gzt_threshold_e_int}
883   {
884     \dim_const:Nn \c__gzt_printer_bindingoffset_dim { \c__gzt_bindingoffset_d_dim }
885   }{
886     \int_compare:nNnTF {\g__gzt_total_inside_pages_number_int}<{\c__gzt_threshold_f_int}
887     {
888       \dim_const:Nn \c__gzt_printer_bindingoffset_dim { \c__gzt_bindingoffset_e_dim }
889     }{
890       \dim_const:Nn \c__gzt_printer_bindingoffset_dim { \c__gzt_bindingoffset_f_dim }
891     }
892   }
893 }
894 }
895 }
896 }

```

The binding offset is applied iff the front cover is required (`frontcover` option), which implies the output is prepared for the printer, with non-zero offset (`\g_@@_for_printer_bool` flag equals true).

```

897 \bool_if:NTF {\g__gzt_cover_bool} {
898   \dim_const:Nn \c__gzt_potential_bindingoffset_dim { \c__gzt_printer_bindingoffset_dim }
899 }{
900   \dim_const:Nn \c__gzt_potential_bindingoffset_dim {\c_zero_dim}
901 }

```

The paper height is rather simple: it is always the layout height dimension plus 2 times (top and bottom) the layout offset dimension (which turns to be non-zero iff the output is prepared for the printer).

```

902 \dim_const:Nn \c__gzt_paperheight_dim { \c__gzt_layoutheight_dim+2\c__gzt_potential_layoutoffset_dim}

```

The paper width is more complicated: it is the layout width dimension plus:

- the “potential” binding offset (which turns to be non-zero iff only the cover page is output),
- the layout offset dimension (which turns to be non-zero iff the output is prepared for the printer):



if for the cover pages just 1 time,

if for the other pages 2 times.

```
903 \bool_if:NTF {\g__gzt_cover_bool} {
904   \dim_const:Nn \c__gzt_paperwidth_dim {
905     \c__gzt_layoutwidth_dim
906     +
907     \c__gzt_potential_layoutoffset_dim
908     +\c__gzt_potential_bindingoffset_dim
909   }
910 }{
911   \dim_const:Nn \c__gzt_paperwidth_dim {
912     \c__gzt_layoutwidth_dim
913     +
914     2
915     \c__gzt_potential_layoutoffset_dim
916     +\c__gzt_potential_bindingoffset_dim
917   }
918 }
```

The image width is the layout width plus the (non-zero) printer layout offset dimension:

```
919 \dim_const:Nn \c__gzt_frontcover_image_width_dim {
920   \c__gzt_layoutwidth_dim
921   +
922   \c__gzt_printer_layoutoffset_dim
923 }
924 \dim_const:Nn \c__gzt_topmargin_dim { 31mm}
925 \dim_const:Nn \c__gzt_topmargin_frontcover_dim {
926   \c__gzt_topmargin_dim
927   + 30mm
928 }
929 \dim_const:Nn \c__gzt_topmargin_inside_cover_dim {
930   \c__gzt_topmargin_dim
931   +10mm
932 }
933 \dim_const:Nn \c__gzt_topmargin_front_matter_dim {
934   \c__gzt_topmargin_inside_cover_dim
```

```

935 }
936 % \dim_const:Nn \c__gzt_topmargin_backcover_dim {
937 %   \c__gzt_topmargin_frontcover_dim
938 % }
939 \dim_const:Nn \c__gzt_headsep_dim { 24mm}
940 \dim_const:Nn \c__gzt_headsep_frontcover_dim {
941   \c__gzt_headsep_dim
942   +31mm
943   % -\c__gzt_potential_layoutoffset_dim
944 }
945 \dim_const:Nn \c__gzt_headsep_inside_frontcover_dim {
946   \c__gzt_headsep_dim
947   +7mm
948 }
949 \dim_const:Nn \c__gzt_headsep_front_matter_dim {
950   \c__gzt_headsep_inside_frontcover_dim
951 }
952 \dim_const:Nn \c__gzt_headheight_dim { \c_zero_dim }
953 \dim_const:Nn \c__gzt_botmargin_dim { 30mm}
954 \dim_const:Nn \c__gzt_footskip_dim { 26mm}

```

Inner margins of the initial issue (# 143) were too small. We make them definitively bigger as of 5 mm (`\c__extra_margin_dim`) and make the outer margins smaller of the same dimension.

```

955 \dim_const:Nn \c__gzt_extra_margin_dim { 5mm }
956 \dim_const:Nn \c__gzt_innermargin_dim { 15mm - \c__gzt_potential_bindingoffset_dim + \c__gzt_extra_margin_dim}
957 \dim_const:Nn \c__gzt_outermargin_dim { 30mm - \c__gzt_extra_margin_dim }
958 \dim_const:Nn \c__gzt_inside_cover_box_width_dim { 165mm }
959 \dim_const:Nn \c__gzt_innermargin_inside_cover_dim {
960   (\c__gzt_layoutwidth_dim - \c__gzt_inside_cover_box_width_dim)/2
961   - \c__gzt_potential_bindingoffset_dim
962   % + \c__gzt_adjustmargin_dim
963 }
964 \dim_const:Nn \c__gzt_outermargin_inside_cover_dim {
965   (\c__gzt_layoutwidth_dim - \c__gzt_inside_cover_box_width_dim)/2
966   % - \c__gzt_adjustmargin_dim
967 }
968 \dim_const:Nn \c__gzt_innermargin_backcover_dim { 10mm }

```

```

969 \dim_const:Nn \c__gzt_outermargin_backcover_dim { \c__gzt_innermargin_backcover_dim }
970 \dim_const:Nn \c__gzt_topmargin_backcover_dim { \c__gzt_innermargin_backcover_dim }
971 \dim_const:Nn \c__gzt_bottommargin_backcover_dim { \c__gzt_innermargin_backcover_dim }
972 \dim_const:Nn \c__gzt_frontcover_image_height_dim { 160mm }
973 \dim_const:Nn \c__gzt_radius_arc_dim { 85mm }
974 \dim_const:Nn \c__gzt_frontmatter_headtext_xshift_dim { 19mm }
975 \dim_const:Nn \c__gzt_frontmatter_headtext_o_xshift_dim {
976   -\c__gzt_frontmatter_headtext_xshift_dim -\c__gzt_potential_layoutoffset_dim
977 }
978 \dim_const:Nn \c__gzt_frontmatter_headtext_e_xshift_dim {
979   \c__gzt_frontmatter_headtext_xshift_dim +\c__gzt_potential_layoutoffset_dim
980 }
981 \dim_const:Nn \c__gzt_frontmatter_headtext_yshift_dim { -6.5mm-\c__gzt_potential_layoutoffset_dim }
982 \dim_const:Nn \c__gzt_header_line_width_dim { 0.25mm }
983 \dim_const:Nn \c__gzt_header_line_yshift_dim { -1mm-\c__gzt_header_line_width_dim }
984 \dim_const:Nn \c__gzt_footer_background_height_dim { 10mm + \c__gzt_potential_layoutoffset_dim }
985 \dim_const:Nn \c__gzt_front_matter_extra_innermargin_dim { 28mm }
986 \dim_const:Nn \c__gzt_front_matter_extra_outermargin_dim { 7mm }
987 \dim_const:Nn \c__gzt_inside_cover_offset_dim { \c_zero_dim }
988 % \dim_const:Nn \c__gzt_inside_cover_offset_dim { 7.5mm }
989 \dim_const:Nn \c__gzt_pictogram_width_dim { 23mm }
990 \dim_const:Nn \c__gzt_header_xshift_dim { \c__gzt_pictogram_width_dim-6mm }
991 \dim_const:Nn \c__gzt_header_yshift_dim { 5mm }
992 \dim_const:Nn \c__gzt_xshift_arccircle_A_dim {
993   \c__gzt_rubrics_abstract_width_dim+\c__gzt_innermargin_dim+10mm+\c__gzt_potential_layoutoffset_dim
994 }
995 \dim_const:Nn \c__gzt_yshift_arccircle_A_dim { -22mm-\c__gzt_potential_layoutoffset_dim }
996 \dim_const:Nn \c__gzt_xshift_arccircle_B_dim {
997   (\c__gzt_rubrics_abstract_width_dim+\c__gzt_innermargin_dim)/2
998   % \c__gzt_innermargin_dim+(\c__gzt_rubrics_abstract_width_dim/2)
999   % \c__gzt_xshift_arccircle_A_dim/2
1000 }
1001 \dim_const:Nn \c__gzt_yshift_arccircle_B_dim { -\c__gzt_potential_layoutoffset_dim }
1002 \dim_const:Nn \c__gzt_xshift_arccircle_C_dim { \c__gzt_potential_layoutoffset_dim-5mm }
1003 \dim_const:Nn \c__gzt_yshift_arccircle_C_dim { -19.75mm-\c__gzt_potential_layoutoffset_dim }
1004 \dim_const:Nn \c__gzt_book_review_frontcover_extend_dim { 12mm }
1005 \dim_const:Nn \c__gzt_tcb_left_dim { 4mm }
1006 \dim_const:Nn \c__gzt_tcb_boxsep_dim { 1mm }

```

```

1007 \dim_const:Nn \c_gzt_tikz_dot_diameter_dim { 0.33mm }
1008 \dim_const:Nn \c_gzt_tikz_dot_spacing_dim { 1.05mm }
1009 \dim_const:Nn \c_gzt_rubric_extra_xoffset_dim { -\c_gzt_innmargin_dim/2 }
1010 \dim_const:Nn \c_gzt_rubric_xoffset_dim { 14.5mm }

```

*(End definition for \c\_gzt\_offset\_dim and others.)*

\c\_gzt\_boxed\_issue\_number\_width\_dim \c\_gzt\_boxed\_issue\_number\_height\_dim We declare the constant dimensions of the box containing the issue number.

```

1011 \dim_const:Nn \c_gzt_boxed_issue_number_width_dim { 30mm}
1012 \dim_const:Nn \c_gzt_boxed_issue_number_height_dim { 8mm}

```

*(End definition for \c\_gzt\_boxed\_issue\_number\_width\_dim and \c\_gzt\_boxed\_issue\_number\_height\_dim.)*

\l\_gzt\_thumbnail\_width\_dim We declare the width of the possible thumbnail glued to the box containing the issue number.

```

1013 \dim_new:N \l_gzt_thumbnail_width_dim
1014 \dim_set:Nn \l_gzt_thumbnail_width_dim {30mm}

```

*(End definition for \l\_gzt\_thumbnail\_width\_dim.)*

\g\_gzt\_abstract\_box\_width\_dim

```

1015 \dim_new:N \g_gzt_abstract_box_width_dim

```

*(End definition for \g\_gzt\_abstract\_box\_width\_dim.)*

\c\_gzt\_original\_parindent\_dim

```

1016 \dim_new:N \c_gzt_original_parindent_dim
1017 \dim_gset_eq:NN \c_gzt_original_parindent_dim \parindent

```

*(End definition for \c\_gzt\_original\_parindent\_dim.)*

\_between\_rubric\_head\_text\_and\_abstract\_dim

```

1018 \dim_new:N \l_gzt_between_rubric_head_text_and_abstract_dim

```

*(End definition for \l\_\_gzt\_between\_rubric\_head\_text\_and\_abstract\_dim.)*

```
\g__gzt_minitoc_circle_diameter_dim
\g__gzt_minitoc_textwidth_dim
\g__gzt_minitoc_xshift_dim 1019 \dim_new:N \g__gzt_minitoc_circle_diameter_dim
\g__gzt_minitoc_yshift_dim 1020 \dim_new:N \g__gzt_minitoc_textwidth_dim
\c__gzt_minitoc_from_circle_xshift_dim 1021 \dim_new:N \g__gzt_minitoc_xshift_dim
\c__gzt_minitoc_from_circle_yshift_dim 1022 \dim_new:N \g__gzt_minitoc_yshift_dim
1023 \dim_gset:Nn \g__gzt_minitoc_circle_diameter_dim {142mm}
1024 \dim_gset:Nn \g__gzt_minitoc_textwidth_dim {65mm}
1025 \dim_gset:Nn \g__gzt_minitoc_xshift_dim {-22mm}
1026 \dim_gset:Nn \g__gzt_minitoc_yshift_dim {30mm}
1027 \dim_const:Nn \c__gzt_minitoc_from_circle_xshift_dim {-15mm}
1028 \dim_const:Nn \c__gzt_minitoc_from_circle_yshift_dim {-\c__gzt_minitoc_from_circle_xshift_dim}
```

*(End definition for \g\_\_gzt\_minitoc\_circle\_diameter\_dim and others.)*

`\c__gzt_footer_height_font_dim` We declare the height of the font displayed in the footer.

```
1029 \dim_const:Nn \c__gzt_footer_height_font_dim {3mm}
```

*(End definition for \c\_\_gzt\_footer\_height\_font\_dim.)*

`\c__gzt_minitoc_list_labelsep_dim`

```
1030 \dim_const:Nn \c__gzt_minitoc_list_labelsep_dim {1em}
```

*(End definition for \c\_\_gzt\_minitoc\_list\_labelsep\_dim.)*

`\c__gzt_authors_photos_width_dim`

```
1031 \dim_const:Nn \c__gzt_authors_photos_width_dim {16mm}
1032 \dim_const:Nn \c__gzt_authors_photos_box_width_dim {\c__gzt_authors_photos_width_dim
1033 + 2mm}
1034 \dim_new:N \l__gzt_minibio_width_dim
```

(End definition for `\c__gzt_authors_photos_width_dim`.)

We set the default geometry of the page.

```
1035 \geometry{
1036   papersize={\c__gzt_paperwidth_dim,\c__gzt_paperheight_dim}
1037 }
```

We create a constant token list that contains the geometry of the front cover.

```
1038 \bool_if:NTF {\g__gzt_cover_bool} {
1039   \tl_const:Nn \c__gzt_frontcover_geometry_tl {
1040     ,layoutsize={\c__gzt_layoutwidth_dim,\c__gzt_layoutheight_dim}
1041     ,layoutvoffset=\c__gzt_potential_layoutoffset_dim
1042     ,bindingoffset=\c__gzt_potential_bindingoffset_dim
1043     ,top=\c__gzt_topmargin_frontcover_dim
1044     ,headsep=\c__gzt_headsep_frontcover_dim
1045     ,headheight=\c__gzt_headheight_dim
1046     % ,bottom=\c_zero_dim
1047     ,bottom=11mm
1048     ,footskip=\c_zero_dim
1049     ,outer=\c_zero_dim
1050     ,inner=\c__gzt_potential_layoutoffset_dim
1051     ,nomarginpar
1052   }
1053 }{
1054   \tl_const:Nn \c__gzt_frontcover_geometry_tl {
1055     ,layoutsize={\c__gzt_layoutwidth_dim,\c__gzt_layoutheight_dim}
1056     ,layoutoffset=\c__gzt_potential_layoutoffset_dim
1057     ,bindingoffset=\c__gzt_potential_bindingoffset_dim
1058     ,top=\c__gzt_topmargin_frontcover_dim
1059     ,headsep=\c__gzt_headsep_frontcover_dim
1060     ,headheight=\c__gzt_headheight_dim
1061     % ,bottom=\c_zero_dim
1062     ,bottom=11mm
1063     ,footskip=\c_zero_dim
1064     ,hmargin=\c__gzt_potential_layoutoffset_dim
1065     ,nomarginpar
1066   }
```

```
1067 }
```

We create a constant token list that contains the geometry of the inside front and back covers.

```
1068 \bool_if:NTF {\g_gzt_cover_bool} {
1069   \tl_const:Nn \c__gzt_inside_cover_geometry_tl {
1070     ,layoutsize={\c__gzt_layoutwidth_dim,\c__gzt_layoutheight_dim}
1071     ,layoutvoffset=\c__gzt_potential_layoutoffset_dim
1072     ,bindingoffset=\c__gzt_potential_bindingoffset_dim
1073     ,top=\c__gzt_topmargin_inside_cover_dim
1074     ,headheight=\c__gzt_headheight_dim
1075     ,headsep=\c__gzt_headsep_inside_frontcover_dim
1076     ,bottom=\c__gzt_botmargin_dim
1077     ,footskip=\c__gzt_fooskip_dim
1078     ,inner=\c__gzt_innmargin_inside_cover_dim-\c__gzt_potential_layoutoffset_dim
1079     ,outer=\c__gzt_outmargin_inside_cover_dim+\c__gzt_potential_layoutoffset_dim
1080     ,nomarginpar
1081   }
1082 }{
1083   \tl_const:Nn \c__gzt_inside_cover_geometry_tl {
1084     ,layoutsize={\c__gzt_layoutwidth_dim,\c__gzt_layoutheight_dim}
1085     ,layoutoffset=\c__gzt_potential_layoutoffset_dim
1086     ,bindingoffset=\c__gzt_potential_bindingoffset_dim
1087     ,top=\c__gzt_topmargin_inside_cover_dim
1088     ,headheight=\c__gzt_headheight_dim
1089     ,headsep=\c__gzt_headsep_inside_frontcover_dim
1090     ,bottom=\c__gzt_botmargin_dim
1091     ,footskip=\c__gzt_fooskip_dim
1092     ,inner=\c__gzt_innmargin_inside_cover_dim
1093     ,outer=\c__gzt_outmargin_inside_cover_dim
1094     ,nomarginpar
1095   }
1096 }
```

We create a constant token list that contains the geometry of the front matter.

```
1097 \tl_const:Nn \c__gzt_front_matter_geometry_tl {
1098   ,layoutsize={\c__gzt_layoutwidth_dim,\c__gzt_layoutheight_dim}
```

```

1099 ,layoutoffset=\c__gzt_potential_layoutoffset_dim
1100 % ,bindingoffset=\c__gzt_potential_bindingoffset_dim
1101 ,top=\c__gzt_topmargin_front_matter_dim
1102 ,headheight=\c__gzt_headheight_dim
1103 ,headsep=\c__gzt_headsep_front_matter_dim
1104 ,bottom=\c__gzt_botmargin_dim
1105 ,footskip=\c__gzt_footskip_dim
1106 ,inner=\c__gzt_innmargin_dim+\c__gzt_front_matter_extra_innmargin_dim
1107 ,outer=\c__gzt_outmargin_dim+\c__gzt_front_matter_extra_outmargin_dim
1108 ,nomarginpar
1109 }

```

We create a constant token list that contains the geometry of the main pages.

```

1110 \tl_const:Nn \c__gzt_main_geometry_tl {
1111 ,layoutsize={\c__gzt_layoutwidth_dim,\c__gzt_layoutheight_dim}
1112 ,layoutoffset=\c__gzt_potential_layoutoffset_dim
1113 % ,bindingoffset=\c__gzt_potential_bindingoffset_dim
1114 ,top=\c__gzt_topmargin_dim-15mm
1115 ,headheight=\c__gzt_headheight_dim
1116 ,headsep=\c__gzt_headsep_dim-18mm
1117 ,bottom=\c__gzt_botmargin_dim
1118 ,footskip=\c__gzt_footskip_dim
1119 ,inner=\c__gzt_innmargin_dim
1120 ,outer=\c__gzt_outmargin_dim
1121 }

```

We create a constant token list that contains the geometry of the back cover.

```

1122 \tl_const:Nn \c__gzt_backcover_geometry_tl {
1123 ,layoutsize={\c__gzt_layoutwidth_dim,\c__gzt_layoutheight_dim}
1124 ,layoutoffset=\c__gzt_potential_layoutoffset_dim
1125 % ,bindingoffset=\c__gzt_potential_bindingoffset_dim
1126 ,top=\c__gzt_topmargin_backcover_dim
1127 % ,top=\c__gzt_topmargin_dim-15mm
1128 % ,headheight=\c__gzt_headheight_dim
1129 % ,headsep=\c__gzt_headsep_dim-18mm
1130 ,bottom=\c__gzt_bottommargin_backcover_dim

```



```

1131 % ,footskip=\c_gzt_footskip_dim
1132 ,inner=\c_gzt_innmargin_backcover_dim
1133 ,outer=\c_gzt_outermargin_backcover_dim
1134 ,nomarginpar
1135 ,hcentering
1136 ,twoside=false
1137 }

```

## 2.8.5 Skips

```

1138 \skip_const:Nn \c_gzt_editorial_presidentmessage_parskip_skip { 12pt plus 2pt minus .8pt }
1139 \skip_const:Nn \c_gzt_mainmatter_parskip_skip { 2pt plus .5pt minus .2pt }

```

## 2.9 Options

In this section, options used by some of the document commands defined by the class are treated.

### 2.9.1 Issues options

Some variables which are involved in options are created.

```

\g_gzt_issue_number_int
\g_gzt_issue_month_int
\g_gzt_issue_year_int
1140 \int_new:N \g_gzt_issue_number_int
1141 \int_new:N \g_gzt_issue_month_int
1142 \int_new:N \g_gzt_issue_year_int
1143 \tl_new:N \g_gzt_frontcover_image_options_tl

```

*(End definition for \g\_gzt\_issue\_number\_int, \g\_gzt\_issue\_month\_int, and \g\_gzt\_issue\_year\_int.)*

number The keys options are created.

month  
year

```

1144 \keys_define:nn { gzt/issuesetup }
1145 {
1146   number .int_gset:N = \g_gzt_issue_number_int,
1147   month .int_gset:N = \g_gzt_issue_month_int,
1148   year .int_gset:N = \g_gzt_issue_year_int,

```

All these options, when used, must receive a value.

```

1149   number .value_required:n = true,
1150   month  .value_required:n = true,
1151   year   .value_required:n = true,

```

If `number` option is not used, its initial value is set to 0. `number`.

```

1152   number .initial:n = 0,

```

The options of the front cover image could be set within `\issuesetup`'s argument.

```

1153   frontcoverimageoptions .tl_gset:N = \g__gzt_frontcover_image_options_tl
1154 }

```

*(End definition for `number`, `month`, and `year`. These functions are documented on page ??.)*

## 2.9.2 Journal options

`\l__gzt_journal_publisher_tl` Some variables which are involved in options are created.

```

\l__gzt_journal_address_tl
\l__gzt_journal_phone_tl
\l__gzt_journal_fax_tl
\l__gzt_journal_email_tl
\l__gzt_journal_url_tl
\l__gzt_journal_issn_tl
\l__gzt_journal_isbn_tl
1155 \tl_new:N \l__gzt_journal_publisher_tl
1156 \tl_new:N \l__gzt_journal_address_tl
1157 \tl_new:N \l__gzt_journal_phone_tl
1158 \tl_new:N \l__gzt_journal_fax_tl
1159 \tl_new:N \l__gzt_journal_email_tl
1160 \tl_new:N \l__gzt_journal_url_tl
1161 \tl_new:N \l__gzt_journal_issn_tl
1162 \tl_new:N \l__gzt_journal_isbn_tl

```

*(End definition for `\l__gzt_journal_publisher_tl` and others.)*

`publisher` The keys options are created.

```

address
phone
fax
email
url
issn
isbn
1163 \keys_define:nn { gzt/journalsetup }
1164 {
1165   publisher .tl_set:N = \l__gzt_journal_publisher_tl,
1166   address  .tl_set:N = \l__gzt_journal_address_tl,
1167   phone    .tl_set:N = \l__gzt_journal_phone_tl,
1168   fax      .tl_set:N = \l__gzt_journal_fax_tl,

```

```

1169 email .tl_set:N = \l__gzt_journal_email_tl,
1170 url .tl_set:N = \l__gzt_journal_url_tl,
1171 issn .tl_set:N = \l__gzt_journal_issn_tl,
1172 isbn .tl_set:N = \l__gzt_journal_isbn_tl,

```

All these options, when used, must receive a value.

```

1173 publisher .value_required:n = true,
1174 address .value_required:n = true,
1175 phone .value_required:n = true,
1176 fax .value_required:n = true,
1177 email .value_required:n = true,
1178 url .value_required:n = true,
1179 issn .value_required:n = true,
1180 isbn .value_required:n = true,
1181 }

```

*(End definition for publisher and others. These functions are documented on page ??.)*

### 2.9.3 Titles options

Some keys options for article's title are created:

- `shorttitle` for the possible alternative title to appear in the table of contents and in the headers,
- `minishorttitle` for the possible alternative title to appear in the mini table of contents of the front cover,
- `notintoc`, a flag that, if true, prevents the title to appear in the table of contents.

```

1182 \keys_define:nn { gzt/title }
1183 {
1184   short .tl_gset:N = \g__gzt_short_title_tl,
1185   minishort .tl_gset:N = \g__gzt_mini_short_title_tl,
1186   notintoc .bool_gset:N = \g__gzt_title_not_in_toc_bool,

```

The following options, when used, must receive a value.

```

1187 short .value_required:n = true,
1188 minishort .value_required:n = true,
1189 }

```

(End definition for *shorttitle*, *minishorttitle*, and *notintoc*. These functions are documented on page ??.)

#### 2.9.4 Subtitles options

`shortsubtitle`  
`minishortsubtitle`  
`notintoc`

Some keys options for article's title are created:

- `shorttitle` for the possible alternative title to appear in the table of contents and in the headers,
- `minishorttitle` for the possible alternative title to appear in the mini table of contents of the front cover,
- `notintoc`, a flag that, if true, prevents the title to appear in the table of contents.

```
1190 \keys_define:nm { gzt/subtitle }
1191 {
1192   short .tl_gset:N = \g__gzt_short_subtitle_tl,
1193   minishort .tl_gset:N = \g__gzt_mini_short_subtitle_tl,
1194   notintoc .bool_gset:N = \g__gzt_subtitle_not_in_toc_bool,
```

The following options, when used, must receive a value.

```
1195   short .value_required:n = true,
1196   minishort .value_required:n = true,
1197 }
```

(End definition for *shortsubtitle*, *minishortsubtitle*, and *notintoc*. These functions are documented on page ??.)

#### 2.9.5 Rubrics options

```
1198 \keys_define:nm { gzt/rubric }
1199 {
1200   abstract .tl_gset:N = \g__gzt_rubric_abstract_tl,
1201   title .tl_gset:N = \g__gzt_rubric_title_tl,
1202   pictogram .tl_gset:N = \g__gzt_rubric_pictofile_tl,
```

The following options, when used, must receive a value.

```
1203   abstract .value_required:n = true,
1204   title .value_required:n = true,
1205   pictogram .value_required:n = true,
1206 }
```

### 2.9.6 Minitoc options

`list` A `list` (boolean) key option for `minitoc` environment is created: if true, `minitoc` should contains `\item` just as a list and the resulting list will be typeset in a special way.

```
1207 \keys_define:nn { gzt/minitoc }
1208 {
1209   list .bool_gset:N = \g__gzt_minitoc_list_bool,
1210   help .bool_gset:N = \g__gzt_minitoc_help_bool,
1211   diameter .dim_gset:N = \g__gzt_minitoc_circle_diameter_dim,
1212   textwidth .dim_gset:N = \g__gzt_minitoc_textwidth_dim,
1213   xshift .dim_gset:N = \g__gzt_minitoc_xshift_dim,
1214   yshift .dim_gset:N = \g__gzt_minitoc_yshift_dim,
```

The following options, when used, must receive a value.

```
1215   diameter .value_required:n = true,
1216   textwidth .value_required:n = true,
1217   xshift .value_required:n = true,
1218   yshift .value_required:n = true,
1219 }
```

*(End definition for `list`. This function is documented on page ??.)*

### 2.9.7 Authors options

`affiliation` The keys options are created.

```
email
minibio
photo
webpage
1220 \keys_define:nn { gzt/authors }
1221 {
1222   affiliation .tl_gset:N = \g__gzt_people_affiliation_tl,
1223   email .tl_gset:N = \g__gzt_people_email_tl,
1224   minibio .tl_gset:N = \g__gzt_people_minibio_tl,
1225   photo .tl_gset:N = \g__gzt_people_photo_tl,
1226   webpage .tl_gset:N = \g__gzt_people_webpage_tl,
```

All these options, when used, must receive a value.

```
1227   affiliation .value_required:n = true,
```

```

1228   email .value_required:n = true,
1229   minibio .value_required:n = true,
1230   photo .value_required:n = true,
1231   webpage .value_required:n = true,
1232 }

```

(End definition for *affiliation* and others. These functions are documented on page ??.)

### 2.9.8 Interviewee options

Some variables which are involved in options are created.

```

\g_gzt_interviewee_minibio_tl
\g_gzt_interviewee_photo_tl
\g_gzt_interviewee_first_last_name_tl

```

```

1233 \tl_new:N \g_gzt_interviewee_minibio_tl
1234 \tl_new:N \g_gzt_interviewee_photo_tl
1235 \tl_new:N \g_gzt_interviewee_first_last_name_tl

```

(End definition for *\g\_gzt\_interviewee\_minibio\_tl*, *\g\_gzt\_interviewee\_photo\_tl*, and *\g\_gzt\_interviewee\_first\_last\_name\_tl*.)

**minibio** The keys options are created.

**photo**

```

1236 \keys_define:nm { gzt/interviewees }
1237 {
1238   minibio .tl_gset:N = \g_gzt_interviewee_minibio_tl,
1239   photo .tl_gset:N = \g_gzt_interviewee_photo_tl,

```

All these options, when used, must receive a value.

```

1240   minibio .value_required:n = true,
1241   photo .value_required:n = true,
1242 }

```

(End definition for *minibio* and *photo*. These functions are documented on page ??.)

### 2.9.9 Book review options

Some variables which are involved in books reviews are created.

```

\g_gzt_bookreview_frontcover_tl
\g_gzt_bookreview_bibkey_tl

```

```

1243 \tl_new:N \g_gzt_bookreview_frontcover_tl
1244 \tl_new:N \g_gzt_bookreview_bibkey_tl

```

*(End definition for \g\_\_gzt\_bookreview\_frontcover\_tl and \g\_\_gzt\_bookreview\_bibkey\_tl.)*

**frontcover** The keys options are created.

**bibkey**

```
1245 \keys_define:nn { gzt/bookreview }
1246 {
1247   frontcover .tl_gset:N = \g__gzt_bookreview_frontcover_tl,
1248   bibkey .tl_gset:N = \g__gzt_bookreview_bibkey_tl,
```

All these options, when used, must receive a value.

```
1249   frontcover .value_required:n = true,
1250   bibkey .value_required:n = true,
1251 }
```

*(End definition for frontcover and bibkey. These functions are documented on page ??.)*

### 2.9.10 Book advertisement options

`\g__gzt_bookadvertisement_frontcover_tl` Some variables which are involved in books advertisements are created.

`\g__gzt_bookadvertisement_bibkey_tl`

```
1252 \tl_new:N \g__gzt_bookadvertisement_frontcover_tl
1253 \tl_new:N \g__gzt_bookadvertisement_bibkey_tl
```

*(End definition for \g\_\_gzt\_bookadvertisement\_frontcover\_tl and \g\_\_gzt\_bookadvertisement\_bibkey\_tl.)*

**frontcover** The keys options are created.

**bibkey**

```
1254 \keys_define:nn { gzt/bookadvertisement }
1255 {
1256   frontcover .tl_gset:N = \g__gzt_bookadvertisement_frontcover_tl,
1257   bibkey .tl_gset:N = \g__gzt_bookadvertisement_bibkey_tl,
```

All these options, when used, must receive a value.

```
1258   frontcover .value_required:n = true,
1259   bibkey .value_required:n = true,
1260 }
```

*(End definition for frontcover and bibkey. These functions are documented on page ??.)*

### 2.9.11 New theorem options

```
1261 \tl_new:N \l__gzt_newtheorem_style_tl
1262 \keys_define:nn { gzt/newtheorem }
1263 {
1264   frenchtitle .tl_set:N = \l__gzt_newtheorem_frenchtitle_tl,
1265   englishtitle .tl_set:N = \l__gzt_newtheorem_englishtitle_tl,
1266   frenchtitle .value_required:n = true,
1267   englishtitle .value_required:n = true,
1268   style .choice:,
1269   style / theorem .code:n = {\tl_set:Nn \l__gzt_newtheorem_style_tl {theorem}},
1270   style / definition .code:n = {\tl_set:Nn \l__gzt_newtheorem_style_tl {definition}},
1271   style / proof .code:n = {\tl_set:Nn \l__gzt_newtheorem_style_tl {proof}},
1272   style / unknown .code:n =
1273   \msg_error:nxxxx { gzt } { unknown-choice }
1274   { style }
1275   { theorem~ or~ definition~ or~ proof }
1276   { \exp_not:n {#1} }
1277 }
```

### 2.10 Colors

In this section, we define the colors that will be used by the class and by the source file of the logo.

```
1278 </class | class-article>
1279 <*class | class-article | class-logo>
1280 \definecolorset{cmyk}{__gzt__}{_color}{
1281   generic_dark,1,.60,.10,0; % kind of blue (!)
1282   light_generic_dark,1,.35,0,0 % kind of blue (!), light
1283 }
1284 \colorlet{__gzt_generic_light_color}{black!50}
1285 \colorlet{__gzt_dark_generic_light_color}{black!60}
1286 \colorlet{__gzt_description_label_light_color}{__gzt_dark_generic_light_color}
1287 \colorlet{__gzt_minotoc_color}{__gzt_generic_light_color}
1288 \colorlet{__gzt_cover_itemize_label_color}{__gzt_light_generic_dark_color}
1289 \colorlet{__gzt_default_text_color}{black}
1290 \colorlet{__gzt_head_text_color}{black!65}
```



```

1291 \colorlet{__gzt_rubric_head_text_color}{__gzt_head_text_color}
1292 \colorlet{__gzt_bibliography_minibios_acknowledgements_bg_color}{black!10}
1293 \colorlet{__gzt_headrule_color}{__gzt_generic_light_color!65}
1294 \colorlet{__gzt_circlerule_color}{__gzt_generic_dark_color!65}
1295 \colorlet{__gzt_frontmatter_text_color}{black!75}
1296 \colorlet{__gzt_people_color}{__gzt_generic_dark_color}
1297 \colorlet{__gzt_arrayrule_color}{__gzt_generic_dark_color}
1298 \colorlet{__gzt_acknowledgements_color}{__gzt_generic_dark_color}
1299 \colorlet{__gzt_question_color}{__gzt_generic_dark_color}
1300 \colorlet{__gzt_boxed_issue_number_bg_color}{__gzt_generic_dark_color}
1301 \colorlet{__gzt_rule_in_toc_color}{__gzt_generic_dark_color}
1302 \colorlet{__gzt_rubric_in_toc_color}{__gzt_generic_dark_color}
1303 \colorlet{__gzt_article_in_toc_color}{__gzt_frontmatter_text_color}
1304 \colorlet{__gzt_rubric_title_color}{__gzt_generic_light_color}
1305 \colorlet{__gzt_article_title_color}{__gzt_generic_dark_color}
1306 \colorlet{__gzt_section_color}{__gzt_generic_dark_color}
1307 \colorlet{__gzt_subsection_color}{__gzt_generic_dark_color!90}
1308 \colorlet{__gzt_subsubsection_color}{__gzt_generic_dark_color!80}
1309 \colorlet{__gzt_rubric_abstract_color}{__gzt_generic_dark_color}
1310 \colorlet{__gzt_article_abstract_color}{__gzt_generic_light_color}
1311 \colorlet{__gzt_dotfill_color}{__gzt_generic_dark_color}
1312 \colorlet{__gzt_about_frontcover_title_color}{__gzt_generic_dark_color}
1313 \colorlet{__gzt_reflected_text_color}{__gzt_generic_dark_color}
1314 \colorlet{__gzt_inside_frontcover_frame_bg_color}{__gzt_generic_dark_color!8}
1315 \colorlet{__gzt_inside_frontcover_frame_title_color}{__gzt_generic_dark_color}
1316 \colorlet{__gzt_footer_bg_color}{black!10}
1317 \colorlet{__gzt_float_title_color}{__gzt_generic_dark_color}
1318 \colorlet{__gzt_float_title_bg_color}{__gzt_generic_dark_color!10}
1319 \colorlet{__gzt_float_frame_color}{__gzt_generic_dark_color!20}
1320 \colorlet{__gzt_chapter_color}{__gzt_generic_dark_color}
1321 \colorlet{__gzt_smf_number_color}{__gzt_generic_dark_color}
1322 \colorlet{__gzt_date_color}{__gzt_generic_light_color}
1323 \colorlet{__gzt_table_head_color}{__gzt_generic_dark_color!25}
1324 \colorlet{__gzt_book_review_frame_bg_color}{__gzt_generic_dark_color!8}
1325 \colorlet{__gzt_book_advertisement_bg_color}{white}
1326 \colorlet{__gzt_book_advertisement_frame_color}{__gzt_generic_dark_color}
1327 \colorlet{__gzt_default_cover_color}{white}

```

```
1328 </class | class-article | class-logo>
```

```
1329 <*class | class-article>
```

## 2.11 Miscellaneous patches

We patch the biblatex's `refsection` environment definition by adding a flag that will be used to test whether we are inside such an environment or not.

```
1330 \AddToHook{env/multicols/begin}{
1331   \bool_gset_true:N \g__gzt_multicols_bool
1332 }
1333 \AddToHook{env/multicols/end}{
1334   \bool_gset_false:N \g__gzt_multicols_bool
1335 }
1336 \AddToHook{env/refsection/begin}{
1337   \bool_gset_true:N \g__gzt_refsection_bool
1338 }
1339 \AddToHook{env/refsection/end}{
1340   \bool_gset_false:N \g__gzt_refsection_bool
1341 }
```

## 2.12 Miscellaneous token lists

We define a token list that will display the font of footer at the right size.

```
1342 \tl_const:Nn \c__gzt_footer_size_font_tl {
1343   \fontsize{\c__gzt_footer_height_font_dim}{\c_zero_dim}\selectfont
1344 }
```

We define some token lists for the long and short forms of SMF.

```
1345 \tl_new:N \g__gzt_smf_short_string_tl
1346 \tl_new:N \g__gzt_smf_string_tl
1347 \tl_gset:Nn \g__gzt_smf_short_string_tl {
1348   % \cs_if_exist:cTF {texorpdfstring}
1349   % {
1350   \texorpdfstring{\c__gzt_smf_short_string_tl}{\c__gzt_smf_short_pdf_string_tl}
```

```

1351 % }{
1352 %   \c__gzt_smf_short_pdf_string_tl
1353 % }
1354 }
1355 \tl_gset:Nn \g__gzt_smf_string_tl {
1356 % \cs_if_exist:cTF {texorpdfstring}
1357 % {
1358 % \texorpdfstring{Soci\et'e~ Math\ematique~ de~ France}{\c__gzt_smf_string_tl}
1359 % \c__gzt_smf_string_tl
1360 % }{
1361 %   \acrlong*{smf}
1362 % }
1363 }

```

We define some token lists for the long and short forms of *Gazette*.

```

1364 \tl_new:N \l__gzt_gzt_short_string_tl
1365 \tl_new:N \l__gzt_gzt_string_tl
1366 \tl_set:Nn \l__gzt_gzt_short_string_tl {
1367   \cs_if_exist:cTF {texorpdfstring}
1368   {
1369     \texorpdfstring{\emph{\c__gzt_journal_short_title_string_tl}}{\c__gzt_journal_short_title_string_tl}
1370   }{
1371     \emph{\c__gzt_journal_short_title_string_tl}
1372   }
1373 }
1374 \tl_set:Nn \l__gzt_gzt_string_tl {
1375   \cs_if_exist:cTF {texorpdfstring}
1376   {
1377     \texorpdfstring{\emph{\c__gzt_journal_title_string_tl}}{\c__gzt_journal_title_string_tl}
1378   }{
1379     \emph{\c__gzt_journal_title_string_tl}
1380   }
1381 }

```

We fix some strings for the PDF's metadata.

```

1382 \tl_new:N \g__gzt_pdftitle_string_tl

```

```

1383 \tl_new:N \g__gzt_pdfauthor_string_tl
1384 \tl_gset:Nn \g__gzt_pdftitle_string_tl {
1385   \c__gzt_pdftitle_string_tl
1386 }
1387 \tl_gset:Nn \g__gzt_pdfauthor_string_tl {
1388   \g__gzt_smf_string_tl
1389 }
1390 \AddToHook{begindocument/before}{
1391   \hypersetup{
1392     pdftitle=\g__gzt_pdftitle_string_tl,
1393     pdfauthor=\g__gzt_pdfauthor_string_tl
1394   }
1395 }

1396 \cs_new_protected:Nn \__gzt_email:n
1397 {
1398   \href{mailto:#1}{\nolinkurl{#1}}
1399 }

```

We create a function that displays the author(s) of an article with a peticular layout.

```

1400 \cs_new_protected:Nn \__gzt_display_author:nmnnn
1401 {
1402   \begin{tabular}[t]{p{\c__gzt_authors_photos_box_width_dim}p{0.75\linewidth}}
1403     \tl_if_empty:nF {#5}
1404     {
1405       \begin{adjustbox}{valign=t}
1406         \includegraphics[width=\c__gzt_authors_photos_width_dim]{#5}
1407       \end{adjustbox}
1408     }
1409     &
1410     \begin{description}[leftmargin=1em,style=nextline,nosep]
1411       \item[\textcolor{\__gzt_people_color}{\DeclareNameAlias{labelname}{default}\citeauthor{#1}}]
1412         \tl_if_empty:nF {#2}
1413         {
1414           #2
1415           \par
1416           \smallskip

```

```

1417     }
1418     \tl_if_empty:nF {#3}
1419     {
1420       \href{mailto:#3}{\nolinkurl{#3}}
1421       \par
1422       \smallskip
1423     }
1424     \tl_if_empty:nF {#4}
1425     {
1426       #4
1427     }
1428     \end{description}
1429 \end{tabular}
1430 }

```

We create a variant of this control sequence that passes the *values* of the variables involved (see <https://tex.stackexchange.com/a/214284/18401>).

```

1431 \cs_generate_variant:Nn \_gzt_display_author:nnnnn { VVVVV }

```

## 2.13 Functions for specifying the people involved in the journal

For this, and thanks to `datatool` package, we create a database of “people” involved in the journal.

```

1432 \DTLnewdb{people}

```

Then we create the internal `\_@@_people` function that let us populate the `\_@@_people` database. Each people will be identified by some identifiers: speciality (optional), firstname, lastname, affiliation, email, role.

```

1433 \tl_new:N \l__gzt_crossref_tl
1434 \cs_new_protected:Nn \_gzt_people:nnnnnnn
1435 {
1436   \DTLnewrow{people}
1437   \DTLnewbentry{people}{first-last-name}{#1}
1438   \DTLnewbentry{people}{affiliation}{#2}
1439   \DTLnewbentry{people}{email}{#3}
1440   \DTLnewbentry{people}{minibio}{#4}
1441   \DTLnewbentry{people}{photo}{#5}

```

```

1442 \DTLnewdbentry{people}{speciality}{#6}
1443 \DTLnewdbentry{people}{role}{#7}
1444 \DTLnewdbentry{people}{webpage}{#8}

1445 \int_if_exist:cF {g__gzt_#7_int}
1446 {
1447   \int_new:c {g__gzt_#7_int}
1448 }
1449 \int_incr:c {g__gzt_#7_int}
1450 \tl_if_in:nnTF { #7 } { author } {
1451   \tl_set:Nn \l__gzt_crossref_tl {\c__gzt_issue_bib_key_tl -art-\int_use:N \g__gzt_articles_int}
1452 } {
1453   \tl_set:Nn \l__gzt_crossref_tl {\c__gzt_issue_bib_key_tl}
1454 }
1455 \tl_set:Nn \l__gzt_people_first_last_name_tl {#1}
1456 \iow_now:Nx \g__gzt_bib_out_iow {
1457   @article{
1458     \c__gzt_issue_bib_key_tl -#7- \int_use:c {g__gzt_#7_int},
1459     \iow_newline:
1460     author={\exp_not:V\l__gzt_people_first_last_name_tl},
1461     \iow_newline:
1462     options={skipbib},
1463     \iow_newline:
1464     crossref = {\l__gzt_crossref_tl}
1465     \iow_newline:
1466   }
1467   \iow_newline:
1468 }
1469 }

```

We create a variant of this control sequence that passes the *values* of the variables involved (see <https://tex.stackexchange.com/a/214284/18401>).

```

1470 \cs_generate_variant:Nn \__gzt_people:nnnnnnn { nVVVnXV }

```

## 2.14 Functions for displaying “academic” signatures of articles without “real” author(s)

We create a function that displays an “academic” signature for articles without “real” author(s).

```
1471 \cs_new_protected:Nn \__gzt_display_academic_signature:n
1472 {
1473   \bigskip
1474   \begin{__gzt_minibiographies_acknowledgements_tcbbox}
1475     #1
1476   \end{__gzt_minibiographies_acknowledgements_tcbbox}
1477 }
```

## 2.15 Functions for displaying people involved in the journal by role

We create the function that displays firstname and lastname of people involved in the journal by role.

```
1478 \cs_new_protected:Nn \__gzt_display_people_by_role:n
1479 {
1480   \DTLforeach*[\DTLiseq{\l__gzt_people_role_tl}{#1}]{people}{
1481     \l__gzt_firstlastname_tl=first-last-name
1482     ,\l__gzt_people_affiliation_tl=affiliation
1483     ,\l__gzt_people_email_tl=email
1484     ,\l__gzt_people_minibio_tl=minibio
1485     ,\l__gzt_people_photo_tl=photo
1486     ,\l__gzt_people_speciality=speciality
1487     ,\l__gzt_people_role_tl=role
1488     ,\l__gzt_people_webpage_tl=webpage
1489   }{
1490     \tl_if_in:NnTF \l__gzt_people_role_tl { editor } {
1491       \item[
1492         \textcolor{__gzt_people_color}{
1493           \__gzt_citeauthor_no_firstinits:n {\c__gzt_issue_bib_key_tl -#1- \exp_not:V\DTLcurrentindex}
1494         }
1495         \tl_if_in:NnF \l__gzt_people_speciality { NoValue } { ~ (\l__gzt_people_speciality) }
1496       ]
1497       \leavevmode
1498       \vbox_top:n {
1499         \l__gzt_people_affiliation_tl
```

```

1500     \newline
1501     \href{mailto:\l__gzt_people_email_tl}{\nolinkurl{\l__gzt_people_email_tl}}
1502   }
1503   \medskip
1504 }{
1505 \tl_if_in:NnTF \l__gzt_people_role_tl { author } {
1506   \tl_if_empty:NF \l__gzt_firstlastname_tl {
1507     \footnotesize
1508     % \noindent
1509     \DTLiffirstrow{
1510       }{
1511         \DTLpar
1512         \medskip
1513       }
1514       \dim_set:Nn \l__gzt_minibio_width_dim {\linewidth-1em - \c__gzt_authors_photos_box_width_dim}
1515       \tl_if_empty:NTF \l__gzt_people_photo_tl
1516       {
1517         \dim_add:Nn \l__gzt_minibio_width_dim {\c__gzt_authors_photos_box_width_dim}
1518       }{
1519         \begin{adjustbox}{valign=t,minipage=\c__gzt_authors_photos_box_width_dim}
1520           \includegraphics[width=\c__gzt_authors_photos_width_dim]{\l__gzt_people_photo_tl}
1521         \end{adjustbox}
1522         \quad
1523       }
1524     \begin{adjustbox}{valign=t,minipage=\l__gzt_minibio_width_dim}
1525       \begin{description}[leftmargin=1em,style=nextline]
1526         \item[
1527           \textcolor{\l__gzt_people_color}{
1528             \__gzt_citeauthor_no_firstinits:n {\c__gzt_issue_bib_key_tl -#1- \exp_not:V\DTLcurrentindex}
1529           }
1530         ]
1531         \tl_if_empty:NF \l__gzt_people_affiliation_tl
1532         {
1533           \mbox{}
1534           \par
1535           \vspace{-2ex}
1536           \l__gzt_people_affiliation_tl
1537         }

```



```

1538     \tl_if_empty:NF \l__gzt_people_email_tl
1539     {
1540         \par
1541         \href{mailto:\l__gzt_people_email_tl}{\nolinkurl{\l__gzt_people_email_tl}}
1542     }
1543     \tl_if_empty:NF \l__gzt_people_webpage_tl
1544     {
1545         \par
1546         \url{\l__gzt_people_webpage_tl}
1547     }
1548     \tl_if_empty:NF \l__gzt_people_minibio_tl
1549     {
1550         \par
1551         \smallskip
1552         \l__gzt_people_minibio_tl
1553     }
1554     \end{description}
1555 \end{adjustbox}
1556 }
1557 }{
1558     \__gzt_citeauthor_no_firstinits:n {\c__gzt_issue_bib_key_tl -#1-
1559     \exp_not:V\DTLcurrentindex}
1560     \tl_if_empty:NF \l__gzt_people_email_tl
1561     {
1562         \c_space_tl(\href{mailto:\l__gzt_people_email_tl}{\nolinkurl{\l__gzt_people_email_tl}})
1563     }
1564 }
1565 }
1566 }
1567 }

```

## 2.16 Function for displaying a reflected text

We create the function that displays a reflected text.

```

1568 \cs_new_protected:Nn \__gzt_reflected_text:n
1569 {
1570     \begin{tikzpicture}

```

```

1571 \tikzset{__gzt_reflect_node/.style={
1572     anchor=base,
1573     inner~ sep=0,
1574     line~ width=0,
1575     font=\Huge,
1576     color=__gzt_reflected_text_color
1577 }
1578 }
1579 \node[__gzt_reflect_node]{#1};
1580 \node[scope~ fading=south,opacity=0.2,yscale=-1,__gzt_reflect_node]{#1};
1581 \end{tikzpicture}
1582 }

```

## 2.17 Displaying the front cover

We create the variable that displays the front cover.

```

1583 \tl_new:N \g__gzt_display_frontcover_tl
1584 \tl_gset:Nn \g__gzt_display_frontcover_tl {
1585   \bool_gset_true:N \g__gzt_frontcover_bool
1586   \pagenumbering{roman}
1587   \pagestyle{__gzt_frontcover_ps}
1588   \pagecolor{\g__gzt_special_edition_color_tl}
1589   \exp_after:wN\newgeometry\exp_after:wN{\c__gzt_frontcover_geometry_tl}
1590   \noindent
1591   \bool_if:NTF {\g__gzt_cover_bool} {
1592     \hspace*{-\c__gzt_potential_layoutoffset_dim}
1593   }{
1594     \hspace*{-2\c__gzt_potential_layoutoffset_dim}
1595   }
1596   \exp_after:wN\includegraphics\exp_after:wN[\g__gzt_frontcover_image_options_tl]{\g__gzt_frontcover_image_file_tl}
1597   \begin{tikzpicture}[remember~ picture, overlay]
1598     \coordinate ( __gzt_circle_minitoc_center) at
1599     (
1600       [xshift=\g__gzt_minitoc_xshift_dim-\c__gzt_potential_layoutoffset_dim,
1601         yshift=\g__gzt_minitoc_yshift_dim+\c__gzt_potential_layoutoffset_dim]
1602       current~ page.south~ east
1603     ) ;

```

```

1604 \node[
1605     name=__gzt_circle_minitoc,
1606     shape=circle,
1607     inner~ sep=\c_zero_dim,
1608     fill=\g_gzt_special_edition_color_tl,
1609     text~ width=\g_gzt_minitoc_circle_diameter_dim
1610 ] at
1611 (__gzt_circle_minitoc_center) {};
1612 \node[text~ width=\g_gzt_minitoc_textwidth_dim,anchor=north~ west] at
1613 (
1614     [xshift=\c_gzt_minitoc_from_circle_xshift_dim,
1615     yshift=\c_gzt_minitoc_from_circle_yshift_dim]
1616     $ (__gzt_circle_minitoc.north)! .5!(__gzt_circle_minitoc.west) $
1617 )
1618 {
1619     \bool_if:NF {\g_gzt_frontcover_without_minitoc_bool} {
1620         \large
1621         \color{__gzt_minitoc_color}
1622         \g_gzt_frontcover_minitoc_tl
1623     }
1624 };
1625 \bool_if:NT {\g_gzt_minitoc_help_bool} {
1626     \fill[red] (__gzt_circle_minitoc_center) circle (2pt);
1627 }
1628 \end{tikzpicture}
1629 \bool_if:NT {\g_gzt_cover_bool} {
1630     \small
1631     \begin{tikzpicture}[remember~ picture, overlay]
1632         \node[
1633             name=__gzt_binding_sw,
1634             inner~ sep=\c_zero_dim,
1635             fill=\g_gzt_special_edition_color_tl,
1636             rotate=90,anchor=west
1637         ]
1638         at
1639         (
1640             [xshift=0.45\c_gzt_potential_bindingoffset_dim,
1641             yshift=15mm+\c_gzt_potential_layoutoffset_dim]

```

```

1642     current~ page.south~ west) {
1643     \No
1644     \bool_if:NTF {\g__gzt_special_edition_bool} {
1645     \c__gzt_special_edition_string_tl
1646     }{
1647     \int_use:N\g__gzt_issue_number_int
1648     }
1649     };
1650     \node[name=__gzt_binding_w,inner~ sep=\c_zero_dim,fill=\g__gzt_special_edition_color_tl,rotate=90] at
1651     ([xshift=0.45\c__gzt_potential_bindingoffset_dim]current~ page.west) {
1652     \bool_if:NTF {\g__gzt_special_edition_bool} {
1653     \tl_if_exist:NTF \g__gzt_special_edition_short_title_tl {
1654     \g__gzt_special_edition_short_title_tl
1655     }{
1656     \g__gzt_special_edition_title_tl
1657     }
1658     }{
1659     \text_uppercase:n {\c__gzt_journal_title_string_tl}
1660     }
1661     };
1662     \node[name=__gzt_binding_nw,inner~ sep=\c_zero_dim,fill=\g__gzt_special_edition_color_tl,rotate=90,anchor=east]
1663     at
1664     (
1665     [
1666     xshift=0.45\c__gzt_potential_bindingoffset_dim
1667     ,yshift=-15mm-\c__gzt_potential_layoutoffset_dim]
1668     current~ page.north~ west
1669     ){
1670     \l__gzt_uppercased_date_format\displaydate{\g__gzt_date}
1671     };
1672     \end{tikzpicture}
1673     }
1674     \vfill
1675     \noindent
1676     \hspace*{10mm}
1677     \hspace*{-\c__gzt_potential_layoutoffset_dim}
1678     \includegraphics[height=22.5mm]{\c__gzt_smf_logo_file_string_tl}
1679     \bool_if:NT {\g__gzt_special_edition_bool} {

```

```

1680   \hfill
1681   \includegraphics[scale=1.2]{gzt-logo}
1682   \hspace*{10mm}
1683 }
1684 % \vfill
1685 \clearpage
1686 \bool_gset_false:N \g__gzt_frontcover_bool
1687 \nopagecolor
1688 }

```

## 2.18 Displaying the inside front cover

We create the variable that displays the inside front cover.

```

1689 \tl_new:N \g__gzt_display_inside_frontcover_tl
1690 \tl_gset:Nn \g__gzt_display_inside_frontcover_tl {
1691   \bool_gset_true:N \g__gzt_inside_frontcover_bool
1692   \pagestyle{__gzt_inside_frontcover_ps}
1693   \exp_after:wN\newgeometry\exp_after:wN{\c__gzt_inside_cover_geometry_tl}
1694   \small
1695   \setlength{\columnseprule}{2pt}
1696   \renewcommand{\columnseprulecolor}{\color{white}}
1697   \begin{__gzt_inside_cover_tcb}[__gzt_tcb_inside_frontcover_style]
1698     \begin{multicols}{2}
1699       \setlength{\columnsep}{1mm}
1700       \bool_if:NTF {\g__gzt_special_edition_bool} {
1701         \begin{description}[leftmargin=1em,style=nextline,labelindent=\c_zero_dim]
1702           \__gzt_display_people_by_role:n {editor}
1703         \end{description}
1704       }{
1705         \begin{description}[leftmargin=1em]
1706           \item[\c__gzt_editors_in_chief_string_tl] \
1707             \begin{description}[leftmargin=1em,style=nextline,labelindent=\c_zero_dim]
1708               \__gzt_display_people_by_role:n {editorinchief}
1709             \end{description}
1710           \bigskip
1711           \par
1712           \item[\c__gzt_editors_string_tl] \

```

```

1713     \begin{description}[leftmargin=1em,style=nextline,labelindent=\c_zero_dim]
1714     \_gzt_display_people_by_role:n {editor}
1715     \end{description}
1716 \end{description}
1717 }
1718 \end{multicols}
1719 \setlength{\columnseprule}{1pt}
1720 \tcblower
1721 \begin{tabular}{
1722 @{}m{.75\c__gzt_inside_cover_box_width_dim}@{}m{.2\c__gzt_inside_cover_box_width_dim-2\tabcolsep}@{}
1723 }
1724 \begin{description}[leftmargin=1em]
1725 \item[\c__gzt_editorial_secretariat_string_tl{}~ :] \ \par
1726 \l__gzt_journal_publisher_tl
1727 % \par
1728 \c_space_tl\textendash{}\c_space_tl
1729 \_gzt_display_people_by_role:n { secretary }\par
1730 \l__gzt_journal_address_tl\par
1731 \c__gzt_phone_string_tl{}~ :~ \l__gzt_journal_phone_tl{} \c_space_tl\textendash{}\c_space_tl
1732 \c__gzt_fax_string_tl{}~ :~ \l__gzt_journal_fax_tl{}\par
1733 \href{mailto:\l__gzt_journal_email_tl}{\nolinkurl{\l__gzt_journal_email_tl}}
1734 % \newline
1735 \c_space_tl\textendash{}\c_space_tl
1736 \url{\l__gzt_journal_url_tl}
1737 \item[\c__gzt_publishingdirector_string_tl{}~ :]
1738 \_gzt_display_people_by_role:n { president }
1739 \item[\c__gzt_issn_string_tl{}~ :] \l__gzt_journal_issn_tl
1740 \tl_if_empty:NF \l__gzt_journal_isbn_tl
1741 {
1742 \item[\c__gzt_isbn_string_tl{}~ :] \l__gzt_journal_isbn_tl
1743 }
1744 \bool_if:NT {\g__gzt_no_inside_backcover_bool} {
1745 \item[\c__gzt_latexclass_string_tl{}~ :]
1746 \_gzt_display_people_by_role:n { classdesigner }
1747 \item[\c__gzt_artistic_director_string_tl{}~ :]
1748 \_gzt_display_people_by_role:n { graphicdesigner }
1749 \item[\c__gzt_printer_string_tl{}~ :] \g__gzt_printer_text_tl
1750 }

```

```

1751     \end{description}
1752     \bool_if:NT {\g__gzt_no_inside_backcover_bool} {
1753     \g__gzt_font_designer_text_tl
1754     }
1755     &
1756     \hspace*{\fill}
1757     \includegraphics[height=20mm]{\c__gzt_smf_logo_file_string_tl}
1758 \end{tabular}
1759 % \
1760 % \c__gzt_font_string_tl
1761 \bigskip
1762 \tl_if_empty:NF \g__gzt_about_frontcover_tl
1763 {
1764     \
1765     \begin{adjustbox}{
1766         valign=t,
1767         minipage=.75\c__gzt_inside_cover_box_width_dim+.2\c__gzt_inside_cover_box_width_dim-2\tabcolsep
1768     }
1769     \begin{description}[leftmargin=1em,font=\color{\g__gzt_about_frontcover_title_color}]
1770     \item[\g__gzt_about_frontcover_string_tl] \g__gzt_about_frontcover_tl
1771     \bool_if:NT {\g__gzt_credit_frontcover_bool} {
1772         \c_space_tl(\c__gzt_credit_frontcover_string_tl){~ :~
1773         \DTLforeach*[\DTLlseq{\l__gzt_people_role_tl}]{frontcovercredit}]{people}{
1774             \l__gzt_firstlastname_tl=first-last-name
1775             ,\l__gzt_people_role_tl=role
1776         }{
1777             \__gzt_citeauthor_no_firstinits:n
1778             {\c__gzt_issue_bib_key_tl -frontcovercredit- \exp_not:V\DTLcurrentindex}
1779         }
1780     }.
1781     }
1782     \end{description}
1783     \end{adjustbox}
1784 }
1785 \end{\gzt_inside_cover_tcb}
1786 \clearpage
1787 \pagenumbering{arabic}
1788 \bool_gset_false:N \g__gzt_inside_frontcover_bool

```

```
1789 }
```

## 2.19 Displaying the inside back cover

We create the variable that displays the inside back cover.

```
1790 \tl_new:N \g__gzt_display_inside_backcover_tl
1791 \tl_gset:Nn \g__gzt_display_inside_backcover_tl {
1792   \bool_gset_true:N \g__gzt_inside_backcover_bool
1793   \cleardoublepage
1794   \pagestyle{\_gzt_inside_backcover_ps}
1795   \exp_after:wN\newgeometry\exp_after:wN{\c__gzt_inside_cover_geometry_tl}
1796   \bool_if:NTF {\g__gzt_no_inside_backcover_bool} {
1797     \hbox{}
1798   }{
1799     \small
1800     \begin{\_gzt_inside_cover_tcb}[\_gzt_tcb_inside_backcover_style]
1801       \bool_if:NF {\g__gzt_special_edition_bool} {
1802         % \begin{multicols}{2}
1803         % \setlength{\columnsep}{1mm}
1804         \file_if_exist_input:n {\c__gzt_authors_instructions_file_tl}
1805         % \end{multicols}
1806         % \setlength{\columnseprule}{1pt}
1807         \tcblower
1808       }
1809       \begin{description}[leftmargin=1em]
1810         \item[\c__gzt_latexclass_string_tl]{~ :}
1811         \_gzt_display_people_by_role:n { classdesigner }
1812         \item[\c__gzt_artistic_director_string_tl]{~ :}
1813         \_gzt_display_people_by_role:n { graphicdesigner }
1814         \item[\c__gzt_printer_string_tl]{~ :} \g__gzt_printer_text_tl
1815       \end{description}
1816       \g__gzt_font_designer_text_tl
1817     \end{\_gzt_inside_cover_tcb}
1818   }
1819   \bool_gset_false:N \g__gzt_inside_backcover_bool
1820 }
```



## 2.20 Displaying the back cover

We create the variable that displays the back cover.

```
1821 \tl_new:N \g__gzt_display_backcover_tl
1822 \tl_gset:Nn \g__gzt_display_backcover_tl {
1823   \bool_gset_true:N \g__gzt_backcover_bool
1824   \pagestyle{\g__gzt_backcover_ps}
1825   \pagecolor{\g__gzt_special_edition_color_tl}
1826   \exp_after:wN\newgeometry\exp_after:wN{\c__gzt_backcover_geometry_tl}
1827   \bool_if:NTF {\g__gzt_special_edition_bool} {
1828     \mbox{}
1829     \vfill
1830     \clist_map_inline:Nn \c__gzt_graphics_extensions_clist{
1831       \file_if_exist:nT {\c__gzt_issue_images_path_string_tl/\g__gzt_special_edition_backcover_image_tl.#1} {
1832         \begin{center}
1833           \includegraphics[width=.25\linewidth]{\g__gzt_special_edition_backcover_image_tl}
1834         \end{center}
1835         \bigskip
1836         \clist_map_break:
1837       }
1838     }
1839     \group_begin:
1840     \leftskip.125\linewidth
1841     \rightskip\leftskip
1842     \file_if_exist_input:nF {\c__gzt_special_edition_backcover_page_file_string_tl}
1843     {
1844       \c_empty_box
1845     }
1846     \par
1847     \group_end:
1848     \vfill
1849     \clist_if_empty:NF \g__gzt_special_edition_logos_clist {
1850       \vfill
1851       \noindent
1852       \clist_map_inline:Nn \g__gzt_special_edition_logos_clist {
1853         \hfill
1854         \includegraphics[height=2cm]{#1}
```

```

1855     \hfill
1856   }
1857   \mbox{}
1858 }
1859 }{
1860   \file_if_exist_input:nF {\c__gzt_backcover_page_file_string_tl}
1861   {
1862     \hbox{}
1863   }
1864 }
1865 }

```

## 2.21 User level commands

Here, we gather all the user level (public) commands.

### 2.21.1 Populating the people involved in the journal

`\editorinchief` We define some document-level commands that let the user specify respectively the editor(s) in chief, the editors, the (SMF) president, the class designer and maintainer(s), and the graphic designer.

`\president` For the editor(s) in chief, we increment the `\g__editors_in_chief_int` counter in order to use singular or plural form of the corresponding string “Rédacteur(s) en chef”.

```

\classdesigner
\fontdesigner
\classmaintainer
\graphicdesigner
1866 \NewDocumentCommand \editorinchief {ommm}
1867 {
1868   \int_incr:N \g__gzt_editors_in_chief_int
1869   \__gzt_people:nnnnnnn {#2}{#3}{#4}{-}{-}{#1}{editorinchief}{-}
1870 }
1871 \NewDocumentCommand \editor {ommm}
1872 {
1873   \__gzt_people:nnnnnnn {#2}{#3}{#4}{-}{-}{#1}{editor}{-}
1874 }
1875
1876 \NewDocumentCommand \president {ommm}
1877 {
1878   \__gzt_people:nnnnnnn {#2}{#3}{#4}{-}{-}{#1}{president}{-}
1879 }

```

```

1880 \NewDocumentCommand \classdesigner {ommm}
1881 {
1882   \__gzt_people:nnnnnnnn {#2}{#3}{#4}{-}{-}{#1}{classdesigner}{-}
1883 }
1884 \NewDocumentCommand \classmaintainer {ommm}
1885 {
1886   \__gzt_people:nnnnnnnn {#2}{#3}{#4}{-}{-}{#1}{classmaintainer}{-}
1887 }
1888 \NewDocumentCommand \fontdesigner {ommm}
1889 {
1890   \__gzt_people:nnnnnnnn {#2}{#3}{#4}{-}{-}{#1}{fontdesigner}{-}
1891 }
1892 \NewDocumentCommand \graphicdesigner {ommm}
1893 {
1894   \__gzt_people:nnnnnnnn {#2}{#3}{#4}{-}{-}{#1}{graphicdesigner}{-}
1895 }
1896 \NewDocumentCommand \secretary {ommm}
1897 {
1898   \__gzt_people:nnnnnnnn {#2}{#3}{#4}{-}{-}{#1}{secretary}{-}
1899 }
1900 % \NewDocumentCommand \frontcovercredit {om}
1901 % {
1902 %   \__gzt_people:nnnnnnnn {#2}{-}{-}{-}{-}{#1}{frontcovercredit}{-}
1903 % }

```

*(End definition for \editorinchief and others. These functions are documented on page ??.)*

## 2.21.2 Issue setup

`\issuesetup` We define the command that lets the user specify the issue setup.

```

1904 \NewDocumentCommand \issuesetup { m } {

```

Its keys are set (only `number`, `month` and `year` are relevant here).

```

1905   \keys_set:nn { gzt/issuesetup } {frontcoverimageoptions={width=\c__gzt_frontcover_image_width_dim},#1}

```

We use here the fact that, if the `number`, `month` or `year` options are not used, their corresponding `\g_@@_issue_number_int`, `\g_@@_issue_month_int` or `\g_@@_issue_year_int` variables are equal to 0 (< 1).

First, if `number` is not used, its `\g_@@_issue_number_int` variable is set to `\c_@@_first_issue_number_int`<sup>4</sup> and a warning is emitted.

```

1906 \int_compare:nNnT {\g__gzt_issue_number_int}<{1}
1907 {
1908   \int_set:Nn \g__gzt_issue_number_int { \c__gzt_first_issue_number_int }
1909   \msg_warning:nnn{gzt}{issue-number-needed}{number}
1910 }

```

If not specified as `\issuesetup`'s key-value options, issue's month and year are computed from issue number (which defaults to `\c_@@_first_issue_month_int`).

First, if `month` or `year` option is not used (one of the previous variables is 0 hence their product is 0 ( $< 1$ )), we compute the issue age in months, useful for both month and year computation.

```

1911 \int_compare:nNnT {\g__gzt_issue_month_int * \g__gzt_issue_year_int}<{1}
1912 {
1913   \int_new:N \g__gzt_issue_age_in_months_int
1914   \int_gset:Nn \g__gzt_issue_age_in_months_int
1915   {
1916     \c__gzt_first_issue_month_int
1917     + \c__gzt_interval_in_months_int
1918     * ( \int_use:N \g__gzt_issue_number_int - \c__gzt_first_issue_number_int )
1919   }
1920 }

```

If the `month` is not used, we replace `\g_@@_issue_month_int` ( $= 0$ ) by its computed value from the issue number.

```

1921 \int_compare:nNnT {\g__gzt_issue_month_int}<{1}
1922 {
1923   \int_gset:Nn \g__gzt_issue_month_int
1924   {
1925     \int_mod:nn { \g__gzt_issue_age_in_months_int } { 12 }
1926   }
1927 }

```

If the `year` is not used, we replace `\g_@@_issue_year_int` ( $= 0$ ) by its computed value from the issue number.

---

<sup>4</sup>The number of the first Gazette's issue using the present class.

```

1928 \int_compare:nNnT {\g__gzt_issue_year_int}<{1}
1929 {
1930   \int_new:N \g__gzt_issue_age_in_years_int
1931   \int_gset:Nn \g__gzt_issue_age_in_years_int
1932   {
1933     \int_div_truncate:nn { \g__gzt_issue_age_in_months_int } { 12 }
1934   }
1935   \int_gset:Nn \g__gzt_issue_year_int
1936   {
1937     \g__gzt_issue_age_in_years_int + \c__gzt_first_issue_year_int
1938   }
1939 }
1940 }

```

*(End definition for \issuesetup. This function is documented on page ??.)*

### 2.21.3 Special edition setup

`\specialeditionsetup` We define the command that lets the user specify the special edition setup.

```

1941 \NewDocumentCommand \specialeditionsetup { m } {
1942   \bool_gset_true:N \g__gzt_special_edition_bool
1943   \bool_gset_true:N \g__gzt_frontcover_without_minitoc_bool
1944   \keys_set:nn { gzt/specialedition } {#1}
1945 }

```

*(End definition for \specialeditionsetup. This function is documented on page ??.)*

### 2.21.4 Moral report setup

`\moralreportsetup` We define the command that lets the user specify the moral report setup.

```

1946 \NewDocumentCommand \moralreportsetup { m } {
1947   \bool_gset_true:N \g__gzt_moral_report_bool
1948   \bool_gset_true:N \g__gzt_frontcover_without_minitoc_bool
1949   \keys_set:nn { gzt/moralreport } {#1}
1950 }

```

*(End definition for \moralreportsetup. This function is documented on page ??.)*

### 2.21.5 Journal setup

`\journalsetup` We define the command that lets the user specify the journal setup. This setup is likely to be rarely changed.

```
1951 \NewDocumentCommand \journalsetup { m } {
```

Its keys are set (only `publisher`, `address`, `phone`, `fax`, `email`, `url` and `issn` are relevant here).

```
1952   \keys_set:nn { gzt/journalsetup } { #1 }
1953 }
```

*(End definition for `\journalsetup`. This function is documented on page ??.)*

### 2.21.6 Date of the president's message

`\date` We redefine the `\date` for the date of the president's message. It takes 3 arguments, each of them being a number: the day, the month and the year.

```
1954 \RenewDocumentCommand \date { mmm } {
1955   \newdate{__gzt_president_message_date}{#1}{#2}{#3}
1956 }
```

*(End definition for `\date`. This function is documented on page ??.)*

### 2.21.7 Interviews

`\interviewee`

```
1957 % \NewDocumentCommand\interviewer { o m } {
1958 % }
1959 \NewDocumentCommand \interviewee { om } {
1960   \tl_if_empty:nT \g__gzt_title_tl {
1961     \tl_gset:Nn \g__gzt_title_tl {
1962       \c__gzt_interview_title_string_tl
1963       \DeclareNameAlias{labelname}{default}\citeauthor{\c__gzt_issue_bib_key_tl -art-\int_use:N
1964         \g__gzt_articles_int}
1965     }
1966   }
1967   \IfNoValueF {#1}
```

```

1968 {
1969   \keys_set:nn { gzt/interviewees } { #1 }
1970 }
1971 \tl_set:Nn \l__gzt_people_first_last_name_tl {#2}
1972 \__gzt_people:nVVVVnxV
1973 {#2}
1974 {\g__gzt_people_affiliation_tl}
1975 {\g__gzt_people_email_tl}
1976 {\g__gzt_people_minibio_tl}
1977 {\g__gzt_people_photo_tl}
1978 {}
1979 {interviewee-art-\int_use:N \g__gzt_articles_int}
1980 {}
1981 % \maketitle
1982 }

```

(End definition for `\interviewee`. This function is documented on page ??.)

### 2.21.8 Miscellaneous

`\academicsignature`

```

1983 \NewDocumentCommand \academicsignature { m } {
1984   \__gzt_display_academic_signature:n {#1}
1985 }

```

(End definition for `\academicsignature`. This function is documented on page ??.)

## 2.22 Definition of the footer of the pages

`\l__gzt_uppercased_date_format` Thanks to `datetime` package, we create the new date `@@_date` and define the date format to be used in the journal. As this date has to be displayed uppercased, we first define a function that displays uppercased months.

```

1986 \cs_new_protected:Nn \__gzt_uppercased_monthname_french:n
1987 {
1988   \@orgargctr=#1\relax
1989   \ifcase\@orgargctr
1990   \PackageError{datetime}{Invalid~ month~ number~ \the\@orgargctr}{

```

```

1991     Month~ numbers~ should~ go~ from~ 1~ (janvier)~ to~ 12~ (decembre)}
1992     \or JANVIER
1993     \or F\ 'EVRIER
1994     \or MARS
1995     \or AVRIL
1996     \or MAI
1997     \or JUIN
1998     \or JUILLET
1999     \or AO\ ^UT
2000     \or SEPTEMBRE
2001     \or OCTOBRE
2002     \or NOVEMBRE
2003     \or D\ 'ECEMBRE
2004     \else
2005     \PackageError{datetime}{Invalid~ month~ number~ \the\@orgargctr}{
2006         Month~ numbers~ should~ go~ from~ 1~ (janvier)~ to~ 12~ (decembre)}
2007     \fi
2008 }
2009 \newdate{__gzt_date}
2010 {1}
2011 {\int_use:N \g__gzt_issue_month_int}
2012 {\int_use:N \g__gzt_issue_year_int}
2013 \newdateformat{l__gzt_uppercased_date_format}{
2014     \__gzt_uppercased_monthname_french:n {\THEMONTH}~ \THEYEAR
2015 }

```

*(End definition for \_\_gzt\_date and \l\_\_gzt\_uppercased\_date\_format.)*

## 2.23 (Re)Definition of document commands that identify the article

The names of the authors of the different articles will appear at several places, and notably in the table of contents where first and middle names have to be rendered as initials. Because automatically rendering initials is a complex task already provided by `biblatex` package, we will create a `.bib` file containing `article` entries for each article of the *Gazette* journal.

This can be done only at the beginning of the document, in order to know the characteristics of the current issue.

```

2016 \AddToHook{begindocument}{

```



We first create a token list containing the date of the current issue formatted as required by biblatex (the month issue needs a leading zero if it is < 10).

```

2017 \tl_new:N \g__gzt_bib_issue_date_tl
2018 \tl_gset:Nn \g__gzt_bib_issue_date_tl {
2019   \int_use:N \g__gzt_issue_year_int-
2020   \int_compare:nNnT {\g__gzt_issue_month_int}<{10}
2021   {
2022     0
2023   }
2024   \int_use:N \g__gzt_issue_month_int
2025 }

```

We will populate the bibliographic file of the current issue with the current issue (as @periodical entry type).

```

2026 \iow_now:Nx \g__gzt_bib_out_iow {
2027   @periodical{\c__gzt_issue_bib_key_tl,\iow_newline:
2028     issuetitle = {\exp_not:f\c__gzt_journal_title_string_tl},\iow_newline:
2029     date       = {\g__gzt_bib_issue_date_tl},\iow_newline:
2030     number     = \int_use:N \g__gzt_issue_number_int,\iow_newline:
2031     % issn     = {\l__gzt_journal_issn_tl},\iow_newline:
2032     options    = {skipbib}\iow_newline:
2033   }
2034   \iow_newline:
2035 }
2036 }

```

`\title` The command for article's title is redefined: the full "article's title" is store in `\g_@@_title_tl` for later use.

`\g__gzt_title_tl`

```

2037 \tl_new:N \g__gzt_title_tl
2038 \RenewDocumentCommand \title { o m } {

```

We increment the `\g_@@_articles_int` integer that counts the number of articles in order to provide for each of them a unique bibliographic key.

```

2039 \int_gincr:N \g__gzt_articles_int
2040 \tl_gclear:N \g__gzt_short_title_tl
2041 \tl_gclear:N \g__gzt_short_subtitle_tl

```

```

2042 \bool_gset_false:N \g__gzt_title_not_in_toc_bool
2043 \IfNoValueF {#1}
2044 {
2045   \keys_set:nn { gzt/title } { #1 }
2046 }
2047 \tl_gset:Nn \g__gzt_title_tl {#2}
2048 \bool_if:nT \g__gzt_tellme_rubric_bool
2049 {
2050   \tl_put_left:Nx \g__gzt_title_tl {\c__gzt_tellme_extra_title_string_tl}
2051 }
2052 \tl_if_empty:NT \g__gzt_short_title_tl {
2053   \tl_gset_eq:NN \g__gzt_short_title_tl \g__gzt_title_tl
2054 }
2055 }

```

*(End definition for \title and \g\_\_gzt\_title\_tl. This function is documented on page ??.)*

`\subtitle` The command for article’s subtitle is redefined: the full and short “article’s subtitles” are store in `\g_@@_subtitle_tl` and `\g_@@_`  
`\g__gzt_subtitle_tl` **short\_subtitle\_tl** for later use.

```

2056 \tl_new:N \g__gzt_subtitle_tl
2057 \NewDocumentCommand \subtitle { o m } {
2058   \bool_gset_false:N \g__gzt_subtitle_not_in_toc_bool
2059   \IfNoValueF {#1}
2060   {
2061     \keys_set:nn { gzt/subtitle } { #1 }
2062   }
2063   \tl_gset:Nn \g__gzt_subtitle_tl {#2}
2064   \tl_if_empty:NT \g__gzt_short_subtitle_tl {
2065     \tl_gset_eq:NN \g__gzt_short_subtitle_tl \g__gzt_subtitle_tl
2066   }
2067 }

```

*(End definition for \subtitle and \g\_\_gzt\_subtitle\_tl. This function is documented on page ??.)*

`\author` The command for article’s author (including its affiliation) is redefined.

```

2068 \RenewDocumentCommand \author { o m } {
2069   \IfNoValueF {#1}
2070   {
2071     \keys_set:nn { gzt/authors } { #1 }
2072   }
2073   \tl_gset:Nn \l__gzt_people_first_last_name_tl {#2}
2074   \__gzt_people:nVVVnxV
2075   {#2}
2076   {\g__gzt_people_affiliation_tl}
2077   {\g__gzt_people_email_tl}
2078   {\g__gzt_people_minibio_tl}
2079   {\g__gzt_people_photo_tl}
2080   {}
2081   {author-art-\int_use:N \g__gzt_articles_int}
2082   {\g__gzt_people_webpage_tl}
2083 }

```

*(End definition for \author. This function is documented on page ??.)*

We create a stream in order to write a bibliographic file

```

2084 \iow_new:N \g__gzt_bib_out_iow
2085 \ior_new:N \g__gzt_bib_out_ior
2086 \tl_new:N \g__gzt_bib_out_tl
2087 \file_if_exist:nTF { \c__gzt_issue_bib_path_string_tl }
2088 {
2089   \ior_open:Nn \g__gzt_bib_out_ior { \c__gzt_issue_bib_path_string_tl }
2090   \ior_str_map_inline:Nn \g__gzt_bib_out_ior
2091   { \tl_gput_right:Nn \g__gzt_bib_out_tl {#1 \par } }
2092   \ior_close:N \g__gzt_bib_out_ior
2093 }{
2094   \typeout{no file! rerun}
2095 }
2096 \iow_open:Nn \g__gzt_bib_out_iow { \c__gzt_issue_bib_path_string_tl }

```

**abstract** The environment for article’s abstract or, more precisely, for its lead paragraph (“chapô” in French typography) is (re)defined.

```

2097 \tl_new:N \g__gzt_abstract_body_tl

```

```

2098 \NewDocumentEnvironment{abstract}{}
2099   {\CollectAbstract}
2100   {\endCollectAbstract}
2101 \NewEnviron{CollectAbstract}
2102   {
2103     \tl_gset_eq:NN \g__gzt_abstract_body_tl \BODY
2104   }

```

## 2.24 Definition of a private main matter switch

A private `\_@@_mainmatter_switch_tl` switch is defined in order to automatically insert some settings.

```

2105 \tl_new:N \g__gzt_mainmatter_switch_tl
2106 \tl_gset:Nn \g__gzt_mainmatter_switch_tl {
2107   \bool_gset_false:N \g__gzt_frontmatter_bool
2108   \bool_gset_true:N \g__gzt_mainmatter_bool
2109   \SetParskip{\c__gzt_mainmatter_parskip_skip}
2110   \pagestyle{\_gzt_mainmatter_ps}
2111 }

2112 \tl_new:N \l__gzt_article_acknowledgements_tl
2113 \cs_new_protected:Nn \_gzt_article_acknowledgements:n
2114 {
2115   \tl_set:Nn \l__gzt_article_acknowledgements_tl { #1 }
2116 }

2117 </class | class-article>

2118 <*class>

```

`\g__gzt_about_frontcover` We define the internal function than let us tell a few words about the front cover.

```

2119 \tl_new:N \g__gzt_about_frontcover_tl
2120 \bool_new:N \g__gzt_credit_frontcover_bool
2121 \tl_new:N \g__gzt_about_frontcover_string_tl
2122 \cs_new_protected:Nn \_gzt_about_frontcover:nnn
2123 {
2124   \tl_if_empty:nF {#1}{

```

```

2125   \bool_gset_true:N \g__gzt_credit_frontcover_bool
2126   \__gzt_people:nnnnnnnn {#1}{-}{-}{-}{-}{-}{frontcovercredit}{-}
2127 }
2128 \tl_gset:Nn \g__gzt_about_frontcover_string_tl { #2 }
2129 \tl_gset:Nn \g__gzt_about_frontcover_tl { #3 }
2130 }

```

*(End definition for \g\_\_gzt\_about\_frontcover.)*

`\__gzt_rubric` We define the internal function than defines and sets the layouts of rubrics.

```

2131 % \tl_new:N \g__gzt_rubric_title_tl
2132 % \tl_new:N \g__gzt_rubric_pictofile_tl
2133 % \tl_new:N \g__gzt_rubric_abstract_tl
2134 \tl_new:N \g__gzt_rubric_abstract_box_tl
2135 \tl_new:N \l__gzt_rubric_head_text_box_tl
2136 %
2137 \cs_new_protected:Nn \__gzt_rubric:nnn
2138 {
2139   \newpage
2140   \tl_gclear:N \g__gzt_rubric_abstract_tl
2141   \tl_gset:Nn \g__gzt_rubric_title_tl {#2}
2142   \file_if_exist:nTF { #3.pdf }{
2143     \tl_gset:Nn \g__gzt_rubric_pictofile_tl {#3}
2144   }{
2145     \tl_gset:Nn \g__gzt_rubric_pictofile_tl {example-image}
2146   }
2147   \IfNoValueF {#1}
2148   {
2149     \keys_set:nn { gzt/rubric } { #1 }
2150   }
2151   \g__gzt_mainmatter_switch_tl
2152   \bool_gset_true:N \g__gzt_mainmatter_bool
2153   \clearpage

```

We reinitialize the items counter in this new rubric.

```

2154   \bool_gset_true:N \g__gzt_rubric_bool

```

```

2155 \bool_gset_false:N \g__gzt_interview_rubric_bool
2156 \bool_gset_false:N \g__gzt_tellme_rubric_bool
2157 \bool_gset_false:N \g__gzt_rearviewmirror_rubric_bool
2158 \bool_gset_false:N \g__gzt_books_rubric_bool
2159 \bool_gset_false:N \g__gzt_previous_article_with_bibliography_or_minibio_bool
2160 \bool_if:nF { \g__gzt_for_authors_bool } {
2161   \int_zero:N \g__gzt_item_in_rubric_int
2162   \phantomsection
2163   \par
2164   \bool_if:NF { \g__gzt_special_edition_bool } {
2165     \addcontentsline{toc}{part}{ \g__gzt_rubric_title_tl }
2166   }
2167   \thispagestyle{ \g__gzt_rubric_ps }
2168   \exp_after:wN \newgeometry \exp_after:wN { \c__gzt_main_geometry_tl }
2169   \tl_if_empty:NTF \g__gzt_rubric_abstract_tl
2170   {
2171     \dim_set:Nn \l__gzt_rubrics_head_text_width_dim { \c__gzt_rubrics_head_text_no_abstract_width_dim }
2172   }
2173   {
2174     \dim_set:Nn \l__gzt_rubrics_head_text_width_dim { \c__gzt_rubrics_head_text_abstract_width_dim }
2175     \tl_gset:Nn \g__gzt_rubric_abstract_box_tl {
2176       \begin{adjustbox}{valign=t,minipage=\c__gzt_rubrics_abstract_width_dim}
2177         \raggedright
2178         \large
2179         \color{ \g__gzt_rubric_abstract_color }
2180         \g__gzt_rubric_abstract_tl
2181       \end{adjustbox}
2182     }
2183   }
2184   \tl_set:Nn \l__gzt_rubric_head_text_box_tl {
2185     \begin{adjustbox}{valign=t,minipage=\l__gzt_rubrics_head_text_width_dim}
2186       \mbox{}
2187       \checkoddpage
2188       \ifoddpage
2189         \raggedleft
2190       \else
2191         \raggedright
2192       \fi

```

```

2193     \color{__gzt_rubric_title_color}
2194     \fontsize{20}{20}\fontseries{bx}\fontshape{sc}\selectfont
2195     \g__gzt_rubric_title_tl
2196   \end{adjustbox}
2197 }
2198 \noindent
2199 \mbox{}
2200 \checkoddpage
2201 \ifoddpage
2202   \hspace*{\c__gzt_rubric_extra_xoffset_dim}
2203   \tl_if_empty:NF \g__gzt_rubric_abstract_tl
2204   {
2205     \g__gzt_rubric_abstract_box_tl
2206   }
2207   \hfill
2208   \l__gzt_rubric_head_text_box_tl
2209   \hspace*{\c__gzt_rubric_xoffset_dim}
2210   \else
2211     \hspace*{\c__gzt_rubric_xoffset_dim}
2212     \l__gzt_rubric_head_text_box_tl
2213     \tl_if_empty:NF \g__gzt_rubric_abstract_tl
2214     {
2215       \hfill
2216       \g__gzt_rubric_abstract_box_tl
2217       \hspace*{\c__gzt_rubric_extra_xoffset_dim}
2218     }
2219     \fi
2220   }
2221 \afterpage{
2222   \bool_gset_false:N \g__gzt_rubric_bool
2223 }

```

We suppress any spurious space in case of lack of % at the end of the public macros built on \\_@@\_rubric:

```

2224 \ignorespaces

```

End of the definition of the private command \\_@@\_rubric:

```
2225 }
```

(End definition for `\_gzt_rubric`.)

```
2226 </class>
```

```
2227 <*class | class-article>
```

We create a command for local (to a given article) tables of contents

```
2228 \cs_new_protected:Nn \_gzt_display_localtoc:
2229 {
2230   \etocsettocstyle{\section*{\contentsname}}{}
2231   \etocsetstyle {section}
2232   {}
2233   {\leavevmode\leftskip 0cm\relax}
2234   {\bfseries\normalsize\makebox[.6cm][l]{\etocnumber}
2235    \etocname\nobreak\hfill\nobreak
2236    \makebox[.5cm][r]{
2237     \etocpage
2238    }
2239   \par
2240   }
2241   {\medskip}
2242   \localtableofcontentswithrelativedepth{+1}
2243   }
2244 \NewDocumentCommand \gztlocaltableofcontents {}
2245 {
2246   \_gzt_display_localtoc: {}
2247 }
```

We create two token lists that will contain:

1. the unique bibliographic key,
2. the `author` value of the bibliographic entry,

of the current article.

```
2248 \tl_new:N \g__gzt_article_bib_key_tl
```



```

2249 \tl_new:N \l__gzt_people_first_last_names_tl
2250 \tl_new:N \g__gzt_authors_first_last_names_tl
2251 \tl_new:N \l__gzt_interviewees_first_last_names_tl
2252 \tl_new:N \g__gzt_citeauthor_tl
2253 \tl_new:N \g__gzt_citeinterviewee_tl
2254 %
2255 \tl_new:N \g__gzt_blx_given_first_inits_tl
2256 \@ifpackagelater{biblatex}{2016/01/01}{
2257   \tl_gset:Nn \g__gzt_blx_given_first_inits_false_tl
2258     {
2259       \togglefalse{abx@bool@giveninits}
2260     }
2261 }{
2262   \tl_set:Nn \g__gzt_blx_given_first_inits_false_tl
2263     {
2264       \togglefalse{blx@firstinits}
2265     }
2266 }
2267 %
2268 \cs_new_protected:Nn \__gzt_citeauthor_no_firstinits:n {
2269   \tl_gset:Nn \g__gzt_citeauthor_tl {
2270     \DeclareNameAlias{labelname}{default}
2271     \group_begin:
2272     \g__gzt_blx_given_first_inits_false_tl
2273     \citeauthor{#1}
2274     \group_end:
2275   }
2276   \cs_if_exist:cTF {texorpdfstring}
2277     {
2278       \texorpdfstring{\g__gzt_citeauthor_tl}{}
2279     }{
2280       \g__gzt_citeauthor_tl
2281     }
2282 }
2283 % \@ifpackageloaded{hyperref}{
2284 %   \tl_gset:Nn \g__gzt_citeauthor_tl {
2285 %     \texorpdfstring{\citeauthor{\g__gzt_article_bib_key_tl}}{}
2286 %   }

```

```

2287 % }{
2288 %   \tl_gset:Nn \g__gzt_citeauthor_tl {
2289 %     \citeauthor{\g__gzt_article_bib_key_tl}
2290 %   }
2291 % }
2292 % \@ifpackageloaded{hyperref}{
2293 %   \tl_gset:No \g__gzt_citeinterviewee_tl {
2294 %     \texorpdfstring{\citeauthor{\g__gzt_article_bib_key_tl}}{}}
2295 %   }
2296 % }{
2297 %   \tl_gset:Nn \g__gzt_citeinterviewee_tl {
2298 %     \citeinterviewee{\g__gzt_article_bib_key_tl}
2299 %   }
2300 % }

```

In the following `\maketitle` document level macro, we will need to display the list the authors of the current article, not as a comma separated list (default `\citeauthor` biblatex's macro behavior), but as an itemized list. For this, we create the `\_@@_itemized_citeauthor` internal function that will make use of `\citeauthor` where `\multinamedelim` and `\finalnamedelim` will be patched into `\item`. As we don't want to globally alter the behavior of these macros, we first store their original meanings in some private control sequence:

```

2301 \cs_set_eq:NN \__gzt_orig_multinamedelim \multinamedelim
2302 \cs_set_eq:NN \__gzt_orig_finalnamedelim \finalnamedelim
2303 \cs_new_protected:Nn \__gzt_itemized_citeauthor:n
2304 {
2305   \cs_set_eq:NN \multinamedelim \item
2306   \cs_set_eq:NN \finalnamedelim \multinamedelim
2307   \AtNextCitekey{\defcounter{maxnames}{100}}
2308   \begin{itemize}[label=\textbullet,noitemsep]
2309     \item \citeauthor{#1}
2310   \end{itemize}
2311   \cs_set_eq:NN \multinamedelim \__gzt_orig_multinamedelim
2312   \cs_set_eq:NN \finalnamedelim \__gzt_orig_finalnamedelim
2313 }

```

We declare two token list which will used in the next (re)definition.

```

2314 \tl_new:N \l__gzt_bullet_and_rule_tl

```

```

2315 \tl_new:N \l__gzt_authors_box_tl
2316 \tl_new:N \l__gzt_abstract_box_tl
2317 \tl_new:N \l__gzt_bullet_and_rule_odd_tl
2318 \tl_new:N \l__gzt_bullet_and_rule_even_tl
2319 \tl_new:N \l__gzt_title_box_tl
2320 %

```

`\maketitle` The command that “makes” the title is redefined.

```

2321 \RenewDocumentCommand \maketitle { s } {

```

We force all the previous floats to be processed before a new article starts (this is already done in `bibliography_minibiographies_`  
`acknowledgements` environment but is repeated here if what is before provides floats but neither bibliography, CV nor acknowledgements).

```

2322 \FloatBarrier

```

We increment the item number in the current rubric.

```

2323 \int_gincr:N \g__gzt_item_in_rubric_int

```

We restore the original length for `\parindent` that has been set to zero in a possible previous “Interview” rubric.

```

2324 \dim_set_eq:NN \parindent \c__gzt_original_parindent_dim

```

We reset all acronyms entries.

```

2325 \glsresetall

```

We reset to zero some counters at each new article.

```

2326 \setcounter{section}{0}
2327 \setcounter{figure}{0}
2328 \setcounter{table}{0}
2329 \setcounter{footnote}{0}
2330 %
2331 \setcounter{equation}{0}
2332 %
2333 \setcounter{theorem}{0}

```

```

2334 % \setcounter{theoreme}{0}
2335 \setcounter{corollary}{0}
2336 % \setcounter{corollaire}{0}
2337 \setcounter{conjecture}{0}
2338 \setcounter{proposition}{0}
2339 \setcounter{lemma}{0}
2340 % \setcounter{lemme}{0}
2341 \setcounter{axiom}{0}
2342 % \setcounter{axiome}{0}
2343 %
2344 \setcounter{definition}{0}
2345 \setcounter{remark}{0}
2346 % \setcounter{remarque}{0}
2347 \setcounter{example}{0}
2348 % \setcounter{exemple}{0}
2349 \setcounter{notation}{0}

```

We store the unique bibliographic key of the current article in the `\g_@@_article_bib_key_tl` token list.

```

2350 \tl_gset:Nn \g__gzt_article_bib_key_tl {
2351   \c__gzt_issue_bib_key_tl
2352   -art-
2353   \int_use:N \g__gzt_articles_int
2354 }

```

We will populate the bibliographic file of the current issue with the current article (title, author(s) and a fixed part giving by the issue number, journal title and date).

Then, we iterate through each row of the authors database in order to get a token list containing the (list of the) author(s) of the current article formatted as required by biblatex (“Last1, First1 [and Last2, First2 [and …]]”).

```

2355 \DTLforeach*[\DTLiseq{\l__gzt_people_role_tl}{author-art-\int_use:N \g__gzt_articles_int}]{people}{
2356   \l__gzt_people_first_last_name_tl=first-last-name
2357   ,\l__gzt_people_role_tl=role
2358 }{
2359   \tl_if_in:NnT \l__gzt_people_role_tl { author } {
2360     \DTLiffirstrow{
2361       \tl_put_right:Nx
2362       \l__gzt_people_first_last_names_tl

```

```

2363     {\exp_not:V\l__gzt_people_first_last_name_tl}
2364   }{
2365     \tl_put_right:Nx
2366     \l__gzt_people_first_last_names_tl
2367     {\~ and~ \exp_not:V\l__gzt_people_first_last_name_tl}
2368   }
2369 }
2370 }
2371 \DTLforeach*[\DTLiseq{\l__gzt_people_role_tl}{interviewee-art-\int_use:N \g__gzt_articles_int}]{people}{
2372   \l__gzt_people_first_last_name_tl=first-last-name
2373   ,\l__gzt_people_role_tl=role
2374 }{
2375   \tl_if_in:NnT \l__gzt_people_role_tl { interviewee } {
2376     \DTLiffirstrow{
2377       \tl_put_right:Nx
2378       \l__gzt_people_first_last_names_tl
2379       {\exp_not:V\l__gzt_people_first_last_name_tl}
2380     }{
2381       \tl_put_right:Nx
2382       \l__gzt_people_first_last_names_tl
2383       {\~ and~ \exp_not:V\l__gzt_people_first_last_name_tl}
2384     }
2385   }
2386 }

```

We now populate the bibliographic file.

```

2387 \tl_if_empty:NF \g__gzt_title_tl {
2388   \iow_now:Nx \g__gzt_bib_out_iow {
2389     @article{
2390       \g__gzt_article_bib_key_tl,
2391       \iow_newline:
2392       title={\exp_not:V\g__gzt_title_tl},
2393       \iow_newline:
2394       \tl_if_empty:NF \g__gzt_subtitle_tl {
2395         subtitle={\exp_not:V\g__gzt_subtitle_tl},
2396         \iow_newline:
2397       }

```

```

2398 \tl_if_eq:NNF { \g__gzt_short_title_tl } { \g__gzt_title_tl } {
2399   shorttitle={\exp_not:V\g__gzt_short_title_tl},
2400   \iow_newline:
2401 }
2402 \tl_if_empty:NF \l__gzt_people_first_last_names_tl
2403 {
2404   author={\exp_not:V\l__gzt_people_first_last_names_tl},
2405   \iow_newline:
2406 }
2407 options={skipbib},
2408 \iow_newline:
2409   crossref = {\c__gzt_issue_bib_key_tl}
2410 }
2411 \iow_newline:
2412 }
2413 }
2414 %
2415 \tl_set:Nn \l__gzt_bullet_and_rule_odd_tl
2416 {
2417   \begin{tikzpicture}[remember~ picture,overlay]
2418     \draw[fill=__gzt_circlerule_color,draw=__gzt_circlerule_color,line~ width=0.7mm]
2419     (
2420       [xshift=-\c__gzt_innermargin_dim-\c__gzt_potential_layoutoffset_dim]0,0 -|
2421       current~ page.west
2422     )
2423     -- (\linewidth,0);
2424     \fill[_gzt_circlerule_color] (\linewidth-2\pgflinewidth,0) circle [radius=2.75mm];
2425   \end{tikzpicture}
2426 }
2427 \tl_set:Nn \l__gzt_bullet_and_rule_even_tl
2428 {
2429   \begin{tikzpicture}[remember~ picture,overlay]
2430     \draw[fill=__gzt_circlerule_color,draw=__gzt_circlerule_color,line~ width=0.7mm]
2431     (0,0 -| current~ page.east) -- (0,0);
2432     \fill[_gzt_circlerule_color] (0,0) circle [radius=2.75mm];
2433   \end{tikzpicture}
2434 }
2435 \tl_set:Nn \l__gzt_title_box_tl

```

```

2436 {
2437   \noindent
2438   \hspace*{18mm}
2439   \begin{adjustbox}{minipage=\linewidth-18mm,valign=t}
2440     \raggedright
2441     \color{__gzt_article_title_color}
2442     \fontsize{20}{25}\selectfont
2443     \bfseries
2444     \g__gzt_title_tl
2445     \tl_if_empty:NF \g__gzt_subtitle_tl {
2446       \par
2447       \g__gzt_subtitle_tl
2448     }
2449   \phantomsection
2450   \par
2451   \bool_if:NTF {\g__gzt_title_not_in_toc_bool} {
2452     \bookmark[page=\thepage,level=chapter]{\g__gzt_short_title_tl}
2453   }{
2454     \addcontentsline{toc}{chapter}{
2455       \tl_if_empty:NTF \g__gzt_short_title_tl {
2456         \g__gzt_title_tl
2457       }{
2458         \g__gzt_short_title_tl
2459       }
2460     \bool_if:NF {\g__gzt_subtitle_not_in_toc_bool} {
2461       \bool_if:NF {
2462         \tl_if_empty_p:N \g__gzt_short_subtitle_tl ||
2463         \g__gzt_interview_rubric_bool ||
2464         \g__gzt_rearviewmirror_rubric_bool
2465       }{
2466         \c_space_tl\textendash{ }\c_space_tl\g__gzt_short_subtitle_tl
2467       }
2468     }
2469     \bool_if:NF {
2470       \tl_if_empty_p:N \l__gzt_people_first_last_names_tl ||
2471       \g__gzt_interview_rubric_bool ||
2472       \g__gzt_rearviewmirror_rubric_bool
2473     }{

```

```

2474     \textsl{
2475       \cs_if_exist:cTF {texorpdfstring}
2476       {
2477         \texorpdfstring{
2478           \c_space_tl\textendash{}\c_space_tl\citeauthor{\g__gzt_article_bib_key_tl}
2479         }{}
2480       }{
2481         \c_space_tl\textendash{}\c_space_tl\citeauthor{\g__gzt_article_bib_key_tl}
2482       }
2483     }
2484   }
2485 }
2486 }
2487 \end{adjustbox}
2488 }
2489 \dim_gset:Nn \g__gzt_abstract_box_width_dim {0.75\linewidth}
2490 % \bool_if:nT { \tl_if_empty_p:N \l__gzt_people_first_last_names_tl }
2491 % {
2492 %   \dim_gset:Nn \g__gzt_abstract_box_width_dim {\linewidth}
2493 % }
2494 \tl_set:Nn \l__gzt_abstract_box_tl
2495 {
2496   \begin{adjustbox}{minipage=\g__gzt_abstract_box_width_dim,max~ width=\g__gzt_abstract_box_width_dim,valign=t}
2497     \mbox{}
2498     \tl_if_exist:NT \g__gzt_abstract_body_tl
2499     {
2500       \raggedright
2501       \bfseries
2502       \color{__gzt_article_abstract_color}
2503       \g__gzt_abstract_body_tl
2504     }
2505   \end{adjustbox}
2506 }
2507 \tl_set:Nn \l__gzt_authors_box_tl
2508 {
2509   \begin{adjustbox}{minipage=0.3\linewidth,min~ width=0.3\linewidth,valign=t}
2510     \bool_if:nTF { \tl_if_empty_p:N \l__gzt_people_first_last_names_tl || \g__gzt_interview_rubric_bool }
2511     {

```



```

2512     \mbox{}
2513   }
2514   {
2515     \color{__gzt_people_color}
2516     \__gzt_itemized_citeauthor:n {\g__gzt_article_bib_key_tl}
2517   }
2518 \end{adjustbox}
2519 }
2520 \bool_if:nTF {
2521   \int_compare_p:nNn { \g__gzt_item_in_rubric_int } = { 1 }
2522 }
2523 {
2524   \mbox{}
2525   \par
2526   \bool_if:nTF {
2527     \tl_if_empty_p:N \g__gzt_rubric_abstract_tl
2528   }{
2529     \xleaders\vbox {
2530       \bigskip
2531     }
2532     \vskip\bigskipamount
2533   }{
2534     \xleaders\vbox {
2535       \smallskip
2536     }
2537     \vskip\smallskipamount
2538   }
2539 }
2540 {
2541   \bool_if:NTF {\g__gzt_previous_article_with_bibliography_or_minibio_bool}
2542   {
2543     \xleaders\vbox {
2544       \mbox{}
2545       \par
2546       \medskip
2547     }
2548     \vskip\medskipamount
2549   }

```

```

2550     {
2551         \xleaders\vbox {
2552             \mbox{}
2553             \par
2554             \smallskip
2555         }
2556         \vskip\smallskipamount
2557     }
2558 }
2559 \bool_gset_false:N \g__gzt_previous_article_with_bibliography_or_minibio_bool

2560 <class-article>\hypersetup{pdftitle=\g__gzt_short_title_tl,pdfauthor=\l__gzt_people_first_last_names_tl}

2561 </class | class-article>

2562 <*class>

```

We fix some of the PDF’s metadata .

```

2563 \bool_if:NT {\g__gzt_for_authors_bool} {
2564     \hypersetup{
2565         pdftitle=\g__gzt_short_title_tl,
2566         pdfauthor=\l__gzt_people_first_last_names_tl
2567     }
2568 }

```

Here, we put the TikZ’s picture of the “bullet and rule” (contained in the `\l__@@_bullet_and_rule_tl` token list) in a `\vbox` that follows a `\cleaders` that makes the whole vanishes at pages boundaries (cf. <https://tex.stackexchange.com/a/31615/18401>).

```

2569 \bool_if:nF { \g__gzt_for_authors_bool } {
2570     % \xleaders\vbox {
2571     %     \bigskip
2572     % }
2573     % \vskip\bigskipamount
2574     \noindent
2575     \checkoddpage
2576     \ifoddpage
2577     \l__gzt_bullet_and_rule_odd_tl
2578     \else

```

```

2579     \l__gzt_bullet_and_rule_even_tl
2580     \fi
2581     \bigskip
2582   }
2583   \par
2584   \nopagebreak[4]

2585 </class>

2586 <*class | class-article>

2587   \l__gzt_title_box_tl
2588   \normalsize
2589   \nopagebreak[3]
2590   \bool_if:nF {
2591     \tl_if_empty_p:N \g__gzt_abstract_body_tl
2592     &&
2593     (
2594       \tl_if_empty_p:N \l__gzt_people_first_last_names_tl ||
2595       \g__gzt_interview_rubric_bool ||
2596       \g__gzt_rearviewmirror_rubric_bool
2597     )
2598   }{
2599     \par
2600     \bigskip
2601     \bigskip
2602     \large
2603     \mbox{}
2604     \checkoddpage
2605     \ifoddpage
2606     \l__gzt_abstract_box_tl
2607     \hspace*{11mm}
2608     \l__gzt_authors_box_tl
2609     \else
2610     \hspace*{-.85\c__gzt_outermargin_dim}
2611     \l__gzt_authors_box_tl
2612     \hspace*{11mm}
2613     \l__gzt_abstract_box_tl

```

```

2614   \fi
2615 }
2616 \tl_gclear:N \g__gzt_title_tl
2617 \tl_gclear:N \g__gzt_subtitle_tl
2618 \tl_gclear:N \g__gzt_abstract_body_tl
2619 \normalsize
2620 \bigskip
2621 \tl_if_empty:NF \g__gzt_abstract_body_tl
2622 % {
2623 %   \tl_if_empty:NF \l__gzt_people_first_last_names_tl
2624 %   {
2625 %     \bigskip
2626 %   }
2627 % }
2628 {
2629   \bigskip
2630 }
2631 \bool_if:nT \g__gzt_interview_rubric_bool
2632 {

```

We set `\parindent` to zero in “Interview” rubric.

```

2633   \dim_zero:N \parindent
2634 % \tl_if_empty:NF \l__gzt_people_photo_tl
2635 % {
2636 %   \begin{adjustbox}{center}
2637 %     \includegraphics[height=50mm]{\l__gzt_people_photo_tl}
2638 %   \end{adjustbox}
2639 % }
2640 }
2641 \color{__gzt_default_text_color}
2642 \IfBooleanF {#1}
2643 {
2644   \bool_if:nF { \g__gzt_multicols_bool || \g__gzt_rearviewmirror_rubric_bool }
2645   {
2646     \begin{multicols}{2}
2647   }
2648 }

```

```
2649 }
```

(End definition for `\maketitle`. This function is documented on page ??.)

We load the file where acronyms are defined.

```
2650 \file_if_exist:nT { \c__gzt_acronyms_file_string_tl } {
2651   \AddToHook{begindocument/before}{\loadglsentries{\c__gzt_acronyms_file_string_tl}}
2652 }
2653 </class | class-article>
2654 <*class>
```

In case of `forauthors` option, we close the `multicols` environment in case it isn't (which happens if neither `\printbibliography` nor `\printauthorsdetails` is used). This should fix issue <https://github.com/dbitouze/gzt/issues/36>.

```
2655 \bool_if:nT { \g__gzt_for_authors_bool }
2656 {
2657   \AddToHook{enddocument}{
2658     \bool_if:NT {\g__gzt_multicols_bool} {
2659       \end{multicols}
2660     }
2661   }
2662 }
```

We load the configuration file (only for the issue's class), which has to be located in the  $\TeX$  search path: at least one such a file is provided by the class and located in the same directory as the class file. This file is loaded at the end of preamble instead of begin of the document in order some settings needed in preamble are taken in account.

```
2663 \AddToHook{begindocument/before}{
2664   \file_if_exist_input:nF {\c__gzt_configuration_file_string_tl}
2665   {
2666     \msg_error:nn { gzt } { configuration-file-missing }
2667   }
2668 }
```

We make use of `etoc` to perform the special layout of the table of contents. For convenience, it is included in a `(long)table` (from `longtable` package) and the following code mainly comes from the `etoc`'s documentation.

```

2669 \@ifpackageloaded{etoc}{
2670   \newif\ifShowPartPageInToc % used before \part{Livres}
2671   % cf etoc manual section Typesetting the TOC as a table
2672   % we use ×\unexpanded× rather than more cumbersome but Knuthian ×\toks× registers
2673   \newtoks\toctabletok
2674   \newcommand*{\appendtotok}[2]{% #1=toks variable, #2=macro, expands only once #2
2675     #1\expandafter\expandafter\expandafter {\expandafter\the\expandafter #1#2}}
2676   \newcommand*{\PreparePart{
2677     \edef\toctablepiece {
2678       \ExceptFirstPart {\noexpand\\[-1.5mm]}
2679       \unexpanded{
2680         \color{__gzt_rubric_in_toc_color}\scshape\fontseries{bx}\selectfont
2681       }
2682       \unexpanded\expandafter{\etocthelinkedname}&
2683       % \ifShowPartPageInToc
2684       \unexpanded{\bfseries\color{__gzt_rubric_in_toc_color}}
2685       \unexpanded\expandafter{\etocthelinkedpage}
2686       % \fi
2687       \noexpand\\}
2688     \gdef\ExceptFirstPart ##1{##1}
2689   }
2690   \newcommand*{\PrepareChapter{
2691     \edef\toctablepiece {
2692       \unexpanded{\color{__gzt_article_in_toc_color}\small}
2693       \unexpanded\expandafter{\etocthelinkedname}&
2694       \unexpanded{\color{__gzt_article_in_toc_color}\small}
2695       \unexpanded\expandafter{\etocthelinkedpage}
2696       \noexpand\\[1mm]}
2697   }
2698   \etocsetstyle{part}{}{}
2699   {\PreparePart \appendtotok\toctabletok\toctablepiece}
2700   {}
2701   \etocsetstyle{chapter}{}{}
2702   {\PrepareChapter \appendtotok\toctabletok\toctablepiece}
2703   {}
2704   \etocsettocstyle
2705   {
2706     \setlength\LTleft{\c_zero_dim}

```

```

2707 \setlength\LTright{\c_zero_dim}
2708 \gdef\ExceptFirstPart ##1{}
2709 \toctabletok {\hypersetup{hidelinks}
2710 \begin{longtable}{
2711 @{\extracolsep{\fill}}p{115mm}@{\quad}!{\color{__gzt_rule_in_toc_color}\vrule
2712 width 0.2mm}@{}r@{}
2713 }
2714 }
2715 {\global\toctabletok\expandafter{
2716 \the\toctabletok\end{longtable}
2717 }
2718 }
2719 }{}

2720 </class>

2721 <*class | class-article>

```

## 2.25 Special tools common to the editorial, the table of contents and the president message

We create an internal function that displays the box containing the issue number, with possible image on its left, followed below by an arbitrary text with a reflection effect.

```

2722 \tl_new:N \g__gzt_boxed_issue_number_tl
2723 \tl_gset:Nn \g__gzt_boxed_issue_number_tl {
2724 \tcbbox{\Large\No\g__gzt_issue_number_int}
2725 }
2726 \cs_new_protected:Nn \__gzt_boxed_issue_number:nn
2727 {
2728 \noindent
2729 \raisebox{\baselineskip}{
2730 \tl_if_empty:nF {#1} {
2731 \makebox[\c_zero_dim][r]{
2732 % \hspace*{\l__gzt_thumbnail_width_dim}
2733 \begin{adjustbox}{valign=t}
2734 \includegraphics[width=\l__gzt_thumbnail_width_dim]{#1}
2735 \end{adjustbox}
2736 }

```

```

2737 }
2738 \bool_if:NTF {\g__gzt_special_edition_bool} {
2739   \tl_set:Nn \l_tmpa_tl {\c__gzt_short_special_edition_string_tl}
2740 }{
2741   \tl_set:Nn \l_tmpa_tl {\No\int_use:N\g__gzt_issue_number_int}
2742 }
2743 \begin{adjustbox}{valign=t}
2744   \begin{tcolorbox}[
2745     enhanced,
2746     title=\l_tmpa_tl,%\int_use:N \g__gzt_issue_number_int,
2747     fonttitle=\Large,
2748     colback=white,
2749     sharp~ corners=all,
2750     height=33mm,
2751     boxrule=\c_zero_dim,
2752     % frame~ hidden,
2753     attach~ boxed~ title~ to~ top~ left,
2754     tikznode~ boxed~ title={minimum~ width=\c__gzt_boxed_issue_number_width_dim},
2755     boxed~ title~ style={
2756       size=minimal,
2757       height=\c__gzt_boxed_issue_number_height_dim,
2758       center~ upper,
2759       before={},
2760       colback=__gzt_boxed_issue_number_bg_color,
2761       sharp~ corners=all,
2762       frame~ hidden,
2763       valign=center,
2764     }
2765   ]
2766   \__gzt_reflected_text:n { #2 }
2767 \end{tcolorbox}
2768 \end{adjustbox}
2769 }
2770 \par
2771 }

2772 \cs_new_protected:Nn \__gzt_before_frontmatter_stuff:
2773 {

```



```

2774 \bool_gset_true:N \g__gzt_frontmatter_bool
2775 \cleardoublepage
2776 \pagestyle{__gzt_frontmatter_ps}
2777 \exp_after:wN\newgeometry\exp_after:wN{\c__gzt_front_matter_geometry_tl}
2778 }
2779 \cs_new_protected:Nn \__gzt_after_frontmatter_stuff:
2780 {
2781 \color{__gzt_default_text_color}
2782 \normalsize
2783 \clearpage
2784 \bool_gset_false:N \g__gzt_frontmatter_bool
2785 }

2786 \cs_new_protected:Nn \__gzt_before_editorial_presidentmessage:nn
2787 {
2788 \__gzt_before_frontmatter_stuff: {}
2789 \__gzt_boxed_issue_number:nn {#1}{#2}
2790 \color{__gzt_frontmatter_text_color}
2791 \fontsize{11}{13.6}\selectfont
2792 \RaggedRight
2793 }
2794 \cs_new_protected:Nn \__gzt_after_editorial_presidentmessage:
2795 {
2796 \justifying
2797 \bigskip
2798 \par
2799 }

```

## 2.26 Displaying the editorial

We create an internal function that displays the editorial.

```

2800 \cs_new_protected:Nn \__gzt_before_display_editorial:n
2801 {
2802 \__gzt_before_editorial_presidentmessage:nn {}{#1}
2803 }
2804 \cs_new_protected:Nn \__gzt_after_display_editorial:
2805 {

```

```

2806 \__gzt_after_editorial_presidentmessage: {}
2807 \hspace*{\fill}
2808 \bool_if:NTF {\g__gzt_special_edition_bool} {
2809   \AtNextCitekey{\defcounter{maxnames}{100}}
2810   \__gzt_citeauthor_no_firstinits:n {\c__gzt_issue_bib_key_tl -editorinchief- 1}
2811 }{
2812   \DTLforeach*[\DTLiseq{\l__gzt_people_role_tl}{editorinchief}]{people}{
2813     \l__gzt_firstlastname_tl=first-last-name
2814     ,\l__gzt_people_role_tl=role
2815   }{
2816     \__gzt_citeauthor_no_firstinits:n {\c__gzt_issue_bib_key_tl -editorinchief- \exp_not:V\DTLcurrentindex}
2817   }
2818 }
2819 \__gzt_after_frontmatter_stuff: {}
2820 }
2821 \cs_new_protected:Nn \__gzt_display_editorial:n
2822 {
2823   \__gzt_before_display_editorial:n {#1}
2824   \file_if_exist_input:nF {\c__gzt_editorial_file_string_tl}
2825   {
2826     \msg_error:nn { gzt } { editorial-file-missing }
2827   }
2828   \__gzt_after_display_editorial: {}
2829 }
2830 \AddToHook{begindocument/before}{
2831   \tl_set_eq:NN \g__gzt_editorial_heading_tl \c__gzt_editorial_heading_string_tl
2832   \bool_if:NT {\g__gzt_special_edition_bool} {
2833     \tl_if_empty:NF \g__gzt_special_edition_editorial_heading_tl {
2834       \tl_set_eq:NN \g__gzt_editorial_heading_tl \g__gzt_special_edition_editorial_heading_tl
2835     }
2836   }
2837   \NewDocumentCommand \editorial { 0{\g__gzt_editorial_heading_tl} }
2838   {
2839     \bool_if:NF {\g__gzt_for_authors_bool} {
2840       \__gzt_display_editorial:n {#1}
2841     }
2842   }
2843 }

```

```
2844 </class | class-article>
```

```
2845 <*class>
```

## 2.27 Displaying the table of contents

We create an internal function that displays the table of contents.

```
2846 \cs_new_protected:Nn \__gzt_display_toc:
2847 {
2848   \__gzt_before_frontmatter_stuff: {}
2849   \__gzt_boxed_issue_number:nn {\g__gzt_frontcover_image_file_tl}{\c__gzt_toc_string_tl}
2850   \phantomsection
2851   \hypertarget{\__gzt_toc}{}
2852   \bool_if:NTF {\g__gzt_special_edition_bool} {
2853     \bookmark[dest=__gzt_toc,level=chapter]{\c__gzt_toc_string_tl}
2854   }{
2855     \bookmark[dest=__gzt_toc,level=part]{\c__gzt_toc_string_tl}
2856   }
2857   \etocsettocdepth.toc{chapter}
2858   \tableofcontents
2859   \the\toctabletok
2860   \__gzt_after_frontmatter_stuff: {}
2861 }
2862 \NewDocumentCommand \gzttableofcontents {}
2863 {
2864   \bool_if:NF {\g__gzt_for_authors_bool} {
2865     \__gzt_display_toc: {}
2866   }
2867 }
```

## 2.28 Displaying the mini table of contents of the front cover

We create an internal function that displays the president's message.

```
2868 \tl_new:N \g__gzt_frontcover_minitoc_tl
2869 \tl_new:N \l__gzt_minitoc_label_tl
2870 \cs_new_protected:Nn \__gzt_frontcover_minitoc:n
```

```

2871 {
2872   \tl_gset:Nn \g__gzt_frontcover_minitoc_tl {#1}
2873 }
2874 \NewDocumentCommand \minitoc { 0{ } m }
2875 {
2876   \keys_set:nn { gzt/minitoc } { #1 }
2877   \__gzt_frontcover_minitoc:n {#2}
2878 }
2879 %
2880 \newlist{__gzt_minitoc_list}{itemize}{1}
2881 \setlist[__gzt_minitoc_list]{itemsep=2ex,label=\textcolor{__gzt_cover_itemize_label_color}\textbullet}
2882 %
2883 \NewDocumentEnvironment{minitoclist}{}
2884 {
2885   \cs_set_eq:NN \__gzt_orig_item \item
2886   \RenewDocumentCommand \item { s 0{ } }{
2887     \tl_set:Nn \l__gzt_minitoc_label_tl {##2}
2888     \__gzt_orig_item\textbf{##2}
2889     \IfBooleanT {##1}
2890     {
2891       \c__gzt_minitoc_rubric_title_separator_string_tl
2892     }
2893   }
2894   \begin{__gzt_minitoc_list}
2895 }{
2896   \end{__gzt_minitoc_list}
2897   \cs_set_eq:NN \item \__gzt_orig_item
2898 }
2899 </class>
2900 <*class | class-article>

```

## 2.29 Displaying the president's message

We create an internal function that displays the president's message.

```

2901 \cs_new_protected:Nn \__gzt_before_display_presidentmessage:

```

```

2902 {
2903   \__gzt_before_editorial_presidentmessage:n { \c__gzt_smf_logo_file_string_tl } { \c__gzt_president_message_string_tl }
2904   \phantomsection
2905   \par
2906   \addcontentsline{toc}{part}{ \g__gzt_smf_short_string_tl }
2907   \addcontentsline{toc}{chapter}{ \c__gzt_president_message_string_tl }
2908 }
2909 \cs_new_protected:Nn \__gzt_after_display_presidentmessage:
2910 {
2911   \__gzt_after_editorial_presidentmessage: {}
2912   \hspace*{\fill}
2913   \c__gzt_president_message_date_string_tl
2914   \displaydate{ \__gzt_president_message_date }
2915   \[1.5mm]
2916   \hspace*{\fill}
2917   \__gzt_display_people_by_role:n { president }
2918   , \c_space_tl
2919   \c__gzt_president_signatory_string_tl
2920   \__gzt_after_frontmatter_stuff: {}
2921 }
2922 \cs_new_protected:Nn \__gzt_display_president_message:
2923 {
2924   \__gzt_before_display_presidentmessage: {}
2925   \file_input:n { \c__gzt_president_message_file_string_tl }
2926   \__gzt_after_display_presidentmessage: {}
2927 }
2928 \NewDocumentCommand \presidentmessage {}
2929 {
2930   \bool_if:NF { \g__gzt_for_authors_bool } {
2931     \__gzt_display_president_message: {}
2932   }
2933 }

```

## 2.30 Chapter, sections, etc. customization

Thanks to `titlesec` package, the chapter, section, subsection and subsubsection formats are customized.

**Chapter** has a “block” shape, is typeset in huge and bold face, without any number, with a null distance between the (missing)

number and the title, with a title in enforced lower case but small caps.

```
2934 \titleformat{\chapter}
2935 [block]
2936 {\Huge\bfseries}
2937 {}
2938 {\c_zero_dim}
2939 {\scshape}
```

**Section** has a “frame” shape, is typeset in bold face, left justified and in color, with number typeset in huge, with a negative distance between the number and the title, with a title in 12.5pt.

```
2940 \titleformat{\section}
2941 {
2942 \raggedright
2943 \bfseries
2944 \color{__gzt_section_color}
2945 }
2946 {\fontsize{20}{15}\selectfont\thesection.\enspace}
2947 {-3pt}
2948 {\fontsize{13}{15}\selectfont}
```

**Subsection:**

```
2949 \titleformat{\subsection}
2950 % [frame]
2951 {
2952 \fontsize{11}{16}\selectfont
2953 \bfseries
2954 \color{__gzt_subsection_color}
2955 }
2956 {\thesubsection\ \textendash}\ }
2957 {\c_zero_dim}
2958 {}
```

**Subsubsection:**

```
2959 \titleformat{\subsubsection}
2960 % [frame]
2961 {
```

```

2962     \fontsize{11}{16}\selectfont
2963     \bfseries
2964     \color{__gzt_subsubsection_color}
2965 }
2966 {}
2967 {\c_zero_dim}
2968 {}

```

## 2.31 First pages

At begin of the document, we automatically :

- set the graphic path,
- set the page grid if the corresponding option has been passed,
- display the front cover and the inside front cover.

```

2969 \AddToHook{begindocument}{
2970   \graphicspath{{\c__gzt_issue_images_path_string_tl//}{..\c__gzt_issue_images_path_string_tl//}}
2971   % \gl:disablehyper
2972   \g__gzt_mainmatter_switch_tl
2973   % \bool_gset_false:N \g__gzt_frontmatter_bool
2974   % \bool_gset_true:N \g__gzt_mainmatter_bool
2975   % \SetParskip{\c__gzt_mainmatter_parskip_skip}
2976   % \pagestyle{__gzt_mainmatter_ps}
2977   \exp_after:wN\newgeometry\exp_after:wN{\c__gzt_main_geometry_tl}
2978 }

2979 </class | class-article>

2980 <*class>

2981 \AddToHook{begindocument}{
2982   \dim_if_exist:NTF \g__gzt_pagegrid_dim {
2983     \pagegridsetup{
2984       enable,
2985       step=\g__gzt_pagegrid_dim
2986     }

```

```

2987 }{
2988   \pagegridsetup{
2989     disable
2990   }
2991 }
2992 % \bool_if:NTF {\g__gzt_for_authors_bool} {
2993 %   \thispagestyle{empty}
2994 %   \includegraphics{gzt-logo}
2995 %   \hfill
2996 %   \includegraphics[height=22.5mm]{\c__gzt_smf_logo_file_string_tl}
2997 %   \par
2998 %   \vfill
2999 %   \begin{adjustbox}{valign=c,minipage=\linewidth}
3000 %     \Large
3001 %     \c__gzt_preliminary_version_string_tl
3002 %   \end{adjustbox}
3003 %   \vfill
3004 %   \newpage
3005 % }{
3006 %   \bool_if:NF {\g__gzt_inside_pages_bool} {
3007 %     \g__gzt_display_frontcover_tl
3008 %     \g__gzt_display_inside_frontcover_tl
3009 %   }
3010 % }
3011 \bool_if:NF {\g__gzt_for_authors_bool} {
3012   \bool_if:NF {\g__gzt_inside_pages_bool} {
3013     \g__gzt_display_frontcover_tl
3014     \bool_if:NTF {\g__gzt_coverpage_bool} {
3015       \AddToHook{begindocument/end}{\end{document}}
3016     }{
3017       \g__gzt_display_inside_frontcover_tl
3018     }
3019   }
3020 }
3021 }
3022 </class>

```



```
3023 <*class | class-article>
```

## 2.32 Page styles

Thanks to `titleps` package loaded by `titlesec`'s `pagestyles` option, we define some page styles.

### 2.32.1 Common tools

Here, we define some tools shared by several pages styles.

The background footer:

```
3024 \tl_new:N \g__gzt_background_footer_tl
3025 \tl_set:Nn \g__gzt_background_footer_tl {
3026   \draw [_gzt_footer_bg_color,fill]
3027     (current~ page.south~ west)
3028     rectangle ([yshift=\c__gzt_footer_background_height_dim]current~ page.south~ east)
3029   ;
3030 }
```

The frontmatter head text:

```
3031 \tl_new:N \l__gzt_frontmatter_head_text_tl
3032 \tl_set:Nn \l__gzt_frontmatter_head_text_tl {
3033   \bool_if:NTF {\g__gzt_special_edition_bool} {
3034     \g__gzt_special_edition_title_tl
3035   }{
3036     \includegraphics[scale=1]{gzt-logo}
3037   }
3038 }
```

The rubric head text:

```
3039 % \tl_new:N \l__gzt_rubric_head_text_tl
3040 % \tl_set:Nn \l__gzt_rubric_head_text_tl {
3041 %   \color{__gzt_rubric_head_text_color}
3042 %   \fontsize{20}{20}\fontseries{bx}\fontshape{sc}\selectfont
3043 %   \g__gzt_rubric_title_tl
3044 % }
```

The frontmatter page head rule:

```
3045 \tl_new:N \g__gzt_frontmatter_page_headrule_tl
3046 \tl_gset:Nn \g__gzt_frontmatter_page_headrule_tl {
3047   \draw [__gzt_headrule_color,line~ width=\c__gzt_header_line_width_dim]
3048     ([yshift=\c__gzt_header_line_yshift_dim]current~ page~ header~ area.south~ west -| current~ page.north~ west)
3049   --
3050     ([yshift=\c__gzt_header_line_yshift_dim]current~ page~ header~ area.south~ east -| current~ page.north~ east)
3051   ;
3052 }
```

The frontmatter page head text:

```
3053 \tl_new:N \g__gzt_frontmatter_headtext_tl
3054 \tl_gset:Nn \g__gzt_frontmatter_headtext_tl {
3055   \mbox{}
3056   \checkoddpaper
3057   \ifoddpaper
3058     \node[
3059       anchor=north~ east,
3060       align=center,
3061       fill=white,
3062       inner~ xsep=3.5mm,
3063       outer~ sep=\c_zero_dim,
3064     ] at
3065     ([
3066       xshift=\c__gzt_frontmatter_headtext_o_xshift_dim,
3067       yshift=\c__gzt_frontmatter_headtext_yshift_dim
3068     ]current~ page.north~ east) {
3069     \Large
3070     \bool_if:NT {\g__gzt_special_edition_bool} {
3071       \c__gzt_short_special_edition_string_tl
3072       \c_space_tl
3073     }
3074     \l__gzt_frontmatter_head_text_tl
3075   }
3076   ;
3077   \else
```

```

3078 \node[
3079 anchor=north~ west,
3080 align=center,
3081 fill=white,
3082 inner~ xsep=3.5mm,
3083 outer~ sep=\c_zero_dim,
3084 ] at
3085 ([
3086 xshift=\c__gzt_frontmatter_headtext_e_xshift_dim,
3087 yshift=\c__gzt_frontmatter_headtext_yshift_dim
3088 ]current~ page.north~ west) {
3089   \Large
3090   \bool_if:NT {\g__gzt_special_edition_bool} {
3091     \c__gzt_short_special_edition_string_tl
3092     \c_space_tl
3093   }
3094   \l__gzt_frontmatter_head_text_tl
3095 }
3096 ;
3097 \fi
3098 }

```

The mainmatter odd page head rule:

```

3099 \tl_new:N \g__gzt_mainmatter_oddpagerule_tl
3100 \tl_gset:Nn \g__gzt_mainmatter_oddpagerule_tl {
3101   \draw [_gzt_headrule_color,line~ width=\c__gzt_header_line_width_dim]
3102   ([yshift=\c__gzt_header_line_yshift_dim]current~ page~ header~ area.south~ east)
3103   --
3104   ([yshift=\c__gzt_header_line_yshift_dim]current~ page~ header~ area.south~ west -| current~ page.north~ west)
3105   ;
3106 }

```

The mainmatter even page head rule:

```

3107 \tl_new:N \g__gzt_mainmatter_evenpagerule_tl
3108 \tl_gset:Nn \g__gzt_mainmatter_evenpagerule_tl {
3109   \draw [_gzt_headrule_color,line~ width=\c__gzt_header_line_width_dim]

```

```

3110 ([yshift=\c_gzt_header_line_yshift_dim]current~ page~ header~ area.south~ west)
3111 --
3112 ([yshift=\c_gzt_header_line_yshift_dim]current~ page~ header~ area.south~ east -| current~ page.north~ east)
3113 ;
3114 }

```

We momentarily switch to a “normal” category code régime in which the colon (: ) is treated as “letter”, which is necessary where (here TikZ and tcolorbox) code makes use of colon.

```

3115 \ExplSyntaxOff
3116 \tcbuselibrary{breakable,skins,hooks,xparse,theorems,listingsutf8}
3117 \usetikzlibrary{babel,fadings,positioning,calc}

```

We create a “minus” version of each of the previous styles for floats with number (and keywords) but without any caption: in such cases, the number should not be followed by any separator.

```

3118 \tcbset{
3119   new/blend into/tables-/.style={
3120     use counter*=table,
3121     /tcb/code={\appto\tcb@new@colopt{,before title={\fnum@table}}}},
3122   new/blend into/figures-/.style={
3123     use counter*=figure,
3124     /tcb/code={\appto\tcb@new@colopt{,before title={\fnum@figure}}}},
3125 }

3126 </class | class-article>

3127 <*class>

3128 \newcommand\gzt@arctthroughthreepoints[4][[]
3129 {
3130   \coordinate (middle1) at ($(#2)!.5!(#3)$);
3131   \coordinate (middle2) at ($(#3)!.5!(#4)$);
3132   \coordinate (aux1) at ($(middle1)!1!90:(#3)$);
3133   \coordinate (aux2) at ($(middle2)!1!90:(#4)$);
3134   \coordinate (center) at ($(intersection of middle1--aux1 and middle2--aux2)$);
3135   \filldraw[fill=white,draw=_gzt_headrule_color,line width=0.25mm,#1]
3136   let \p1=(#2)-(center)$,
3137   \p2=(#4)-(center)$,

```

```

3138 \n0={veclen(\p1)},
3139 \n1={atan2(\y1,\x1)},
3140 \n2={atan2(\y2,\x2)},
3141 \n3={\n2>\n1?\n2:\n2+360}
3142 in (#2) arc(\n1:\n3:\n0);
3143 % \foreach \p in {#2,#3,#4,center}
3144 % \fill[red] (\p) circle(2pt);
3145 }

3146 </class>

3147 <*class | class-article>

3148 \ExplSyntaxOn

3149 </class | class-article>

3150 <*class>

```

The rubric page head rule:

```

3151 \tl_new:N \g__gzt_rubric_page_head_tl
3152 \tl_gset:Nn \g__gzt_rubric_page_head_tl {
3153   \bool_if:nF { \g__gzt_for_authors_bool } {
3154     \tikz[remember~ picture,overlay] {
3155       \path (current~ page.north~ west |- current~ page~ header~ area.south~ west) coordinate (__gzt_pwest);
3156       \path (current~ page.north~ east |- current~ page~ header~ area.south~ east) coordinate (__gzt_peast);
3157       \draw [__gzt_headrule_color,line~ width=\c__gzt_header_line_width_dim]
3158         ([yshift=\c__gzt_header_line_yshift_dim]__gzt_pwest)
3159         --
3160         ([yshift=\c__gzt_header_line_yshift_dim]__gzt_peast)
3161       ;
3162     \tl_if_empty:NF \g__gzt_rubric_abstract_tl {
3163       \mbox{}
3164       \checkoddpage
3165       \ifoddpage
3166       \coordinate (__gzt_A) at (
3167         [
3168         xshift=\c__gzt_xshift_arccircle_A_dim,

```

```

3169     yshift=\c__gzt_yshift_arccircle_A_dim
3170 ]
3171 current~ page.north~ west
3172 );
3173 \coordinate (__gzt_B) at (
3174 [
3175 xshift=\c__gzt_xshift_arccircle_B_dim,
3176 yshift=\c__gzt_yshift_arccircle_B_dim
3177 ]
3178 current~ page.north~ west
3179 );
3180 \coordinate (__gzt_C) at (
3181 [
3182 xshift=\c__gzt_xshift_arccircle_C_dim,
3183 yshift=\c__gzt_yshift_arccircle_C_dim
3184 ]
3185 current~ page.north~ west
3186 );
3187 \gzt@arcthroughthreepoints{__gzt_A}{__gzt_B}{__gzt_C};
3188 \else
3189 \coordinate (__gzt_A) at (
3190 [
3191 xshift=-\c__gzt_xshift_arccircle_A_dim,
3192 yshift=\c__gzt_yshift_arccircle_A_dim
3193 ]
3194 current~ page.north~ east
3195 );
3196 \coordinate (__gzt_B) at (
3197 [
3198 xshift=-\c__gzt_xshift_arccircle_B_dim,
3199 yshift=\c__gzt_yshift_arccircle_B_dim
3200 ]
3201 current~ page.north~ east
3202 );
3203 \coordinate (__gzt_C) at (
3204 [
3205 xshift=-\c__gzt_xshift_arccircle_C_dim,
3206 yshift=\c__gzt_yshift_arccircle_C_dim

```

```

3207     ]
3208     current~ page.north~ east
3209     );
3210     \gzt@arcthroughthreepoints{__gzt_C}{__gzt_B}{__gzt_A};
3211     \fi
3212   }
3213 }
3214 }
3215 }

```

### 2.32.2 Front cover page style

```

3216 \newpagestyle{__gzt_frontcover_ps}[]{
3217   \sethead
3218   {}
3219   {
3220     \adjustbox{stack=c}{
3221       {\Large
3222         \c__gzt_frontcover_header_string_tl
3223       }\\[7mm]
3224       \adjustbox{scale=2.08}{
3225         \huge
3226         \bool_if:NT {\g__gzt_special_edition_bool} {
3227           \color{__gzt_generic_dark_color}
3228         }
3229         \l__gzt_frontmatter_head_text_tl
3230       }
3231     }
3232   }
3233   {}
3234   \setfoot
3235   {}
3236   {}
3237   {}
3238 }

```

### 2.32.3 Inside front cover page style

```

3239 \newpagestyle{__gzt_inside_frontcover_ps}[] {
3240   \sethead
3241   [
3242     \tikz[remember~ picture,overlay] {
3243       \g__gzt_frontmatter_page_headrule_tl
3244       \g__gzt_frontmatter_headtext_tl
3245     }
3246   ]
3247   []
3248   []
3249   {}
3250   {
3251     \tikz[remember~ picture,overlay] {
3252       \g__gzt_frontmatter_page_headrule_tl
3253       \g__gzt_frontmatter_headtext_tl
3254     }
3255   }
3256   {}
3257   \setfoot
3258   []
3259   [
3260     \c__gzt_footer_string_tl
3261   ]
3262   []
3263   {}
3264   {
3265     \c__gzt_footer_string_tl
3266   }
3267   {}
3268 }
3269 </class>
3270 <*class | class-article>

```

### 2.32.4 Front matter page style

```

3271 \newpagestyle{__gzt_frontmatter_ps}[] {
3272   \widenhead*{\c__gzt_front_matter_extra_innermargin_dim}{\c__gzt_front_matter_extra_outermargin_dim}

```



```

3273 \sethead
3274 [
3275   \tikz[remember~ picture,overlay] {
3276     \g__gzt_frontmatter_page_headrule_tl
3277     \g__gzt_frontmatter_headtext_tl
3278   }
3279 ]
3280 []
3281 []
3282 {}
3283 {
3284   \tikz[remember~ picture,overlay] {
3285     \g__gzt_frontmatter_page_headrule_tl
3286     \g__gzt_frontmatter_headtext_tl
3287   }
3288 }
3289 {}
3290 \setfoot
3291 [\c__gzt_footer_size_font_tl\thepage]
3292 [
3293   \c__gzt_footer_string_tl
3294 ]
3295 [
3296 <class-article>\c__gzt_compiled_string_tl
3297 ]
3298 {
3299 <class-article>\c__gzt_compiled_string_tl
3300 }
3301 {
3302   \c__gzt_footer_string_tl
3303 }
3304 {\c__gzt_footer_size_font_tl\thepage}
3305 }
3306 </class | class-article>
3307 <*class>

```

### 2.32.5 Rubric first page style

```
3308 \newpagestyle{__gzt_rubric_ps}[] {
3309   \widenhead{\c_zero_dim}{\c_zero_dim}
3310   \sethead
3311   [
3312   ]
3313   [
3314   ]
3315   [
3316     \g__gzt_rubric_page_head_tl
3317     \bool_if:nF { \g__gzt_for_authors_bool } {
3318       \adjustbox{raise={\c__gzt_header_yshift_dim}{\height},lap=-\c__gzt_header_xshift_dim-\linewidth}{
3319         \includegraphics[width=\c__gzt_pictogram_width_dim]{\g__gzt_rubric_pictofile_tl}
3320       }
3321     }
3322   ]
3323   {
3324     \g__gzt_rubric_page_head_tl
3325   }
3326   {}
3327   {
3328     \bool_if:nF { \g__gzt_for_authors_bool } {
3329       \adjustbox{raise={\c__gzt_header_yshift_dim}{\height},lap=\c__gzt_header_xshift_dim}{
3330         \includegraphics[width=\c__gzt_pictogram_width_dim]{\g__gzt_rubric_pictofile_tl}
3331       }
3332     }
3333   }
3334   \setfoot
3335   [\c__gzt_footer_size_font_tl\thepage]
3336   [
3337     \c__gzt_footer_string_tl
3338   ]
3339   []
3340   {}
3341   {
3342     \c__gzt_footer_string_tl
3343   }
```

```

3344   {\c__gzt_footer_size_font_tl\thepage}
3345 }

```

### 2.32.6 Advertisement page style

```

3346 \newpagestyle{__gzt_advertisement_ps}[] {
3347   \widenhead{\c_zero_dim}{\c_zero_dim}
3348   \sethead
3349   [
3350   \tikz[remember~ picture,overlay] {\g__gzt_mainmatter_evenpage_headrule_tl}
3351   ]
3352   [
3353   \adjustbox{raise={\c__gzt_header_yshift_dim}{\height}}{
3354     \large\bfseries\scshape\color{__gzt_head_text_color}\c__gzt_advertisement_string_tl
3355   }
3356   ]
3357   []
3358   {}
3359   {
3360     \adjustbox{raise={\c__gzt_header_yshift_dim}{\height}}{
3361       \large\bfseries\scshape\color{__gzt_head_text_color}\c__gzt_advertisement_string_tl
3362     }
3363   }
3364   {
3365     \tikz[remember~ picture,overlay] {\g__gzt_mainmatter_oddpage_headrule_tl}
3366   }
3367   \setfoot
3368   [\c__gzt_footer_size_font_tl\thepage]
3369   [
3370     \c__gzt_footer_string_tl
3371   ]
3372   []
3373   {}
3374   {
3375     \c__gzt_footer_string_tl
3376   }
3377   {\c__gzt_footer_size_font_tl\thepage}
3378 }

```

### 2.32.7 For blank pages added in order to ensure document total page numbers is a multiple of four

```
3379 \newpagestyle{__gzt_blank_pages_ps}[]{  
3380   \sethead  
3381   {}  
3382   {}  
3383   {}  
3384   \setfoot  
3385   [\c__gzt_footer_size_font_tl\thepage]  
3386   [  
3387     \c__gzt_footer_string_tl  
3388   ]  
3389   []  
3390   {}  
3391   {  
3392     \c__gzt_footer_string_tl  
3393   }  
3394   {\c__gzt_footer_size_font_tl\thepage}  
3395 }
```

### 2.32.8 Inside back cover page style

```
3396 \newpagestyle{__gzt_inside_backcover_ps}[]{  
3397   \sethead  
3398   [  
3399     \tikz[remember~ picture,overlay] {  
3400       \g__gzt_frontmatter_page_headrule_tl  
3401       \g__gzt_frontmatter_headtext_tl  
3402     }  
3403   ]  
3404   []  
3405   []  
3406   {}  
3407   {  
3408     \tikz[remember~ picture,overlay] {  
3409       \g__gzt_frontmatter_page_headrule_tl  
3410       \g__gzt_frontmatter_headtext_tl  
3411     }  
3412   }
```

```

3413 {}
3414 \setfoot
3415 []
3416 [
3417   \c__gzt_footer_string_tl
3418 ]
3419 []
3420 {}
3421 {
3422   \c__gzt_footer_string_tl
3423 }
3424 {}
3425 }

```

### 2.32.9 Back cover page style

```

3426 \newpagestyle{__gzt_backcover_ps}[] {
3427   \sethead
3428   {}
3429   {}
3430   {}
3431   \setfoot
3432   {}
3433   {}
3434   {}
3435 }

```

We define crop marks.

```

3436 % \bool_if:NT {\g__gzt_for_printer_bool} {
3437 %   \AddEverypageHook{
3438 %     \tikz[remember~ picture,overlay] {
3439 %       \draw ([yshift=\c__gzt_potential_layoutoffset_dim]current~ page.south~ west) -- +(0.25,0);
3440 %       \draw ([xshift=\c__gzt_potential_layoutoffset_dim]current~ page.south~ west) -- +(0,0.25);
3441 %       %% lower right
3442 %       \draw ([yshift=\c__gzt_potential_layoutoffset_dim]current~ page.south~ east) -- +(-0.25,0);
3443 %       \draw
3444 %       (
3445 %         [xshift=-\c__gzt_potential_layoutoffset_dim-\c__gzt_potential_bindingoffset_dim]

```

```

3446 %         current~ page.south~ east
3447 %     ) -- +(0,0.25);
3448 %     %% upper left
3449 %     \draw ([yshift=-\c__gzt_potential_layoutoffset_dim]current~ page.north~ west) -- +(0.25,0);
3450 %     \draw ([xshift=\c__gzt_potential_layoutoffset_dim]current~ page.north~ west) -- +(0,-0.25);
3451 %     %% upper right
3452 %     \draw ([yshift=-\c__gzt_potential_layoutoffset_dim]current~ page.north~ east) -- +(-0.25,0);
3453 %     \draw
3454 %     (
3455 %         [xshift=-\c__gzt_potential_layoutoffset_dim-\c__gzt_potential_bindingoffset_dim]
3456 %         current~ page.north~ east) -- +(0,-0.25
3457 %     );
3458 % }
3459 % }
3460 % }
3461 </class>
3462 <*class | class-article>

```

We draw a gray background at the bottom of each page, but the first one.

```

3463 \AddToHook{shipout/background}{
3464 <class> \bool_if:nF { \g__gzt_frontcover_bool || \g__gzt_backcover_bool }{
3465     \bool_if:NF { \g__gzt_advertisement_bool } {
3466         \tikz[remember~ picture,overlay] { \g__gzt_background_footer_tl }
3467     }
3468 <class> }
3469 }

```

### 2.32.10 Main matter page style

```

3470 \newpagestyle{\_gzt_mainmatter_ps}[] {
3471     \widenhead{\c_zero_dim}{\c_zero_dim}
3472     \sethead
3473     [
3474     \tikz[remember~ picture,overlay] { \g__gzt_mainmatter_evenpage_headrule_tl }
3475     ]
3476     [
3477     \adjustbox{raise={\c__gzt_header_yshift_dim}{\height}}{

```

```

3478 \large\bfseries\scshape\color{__gzt_head_text_color}\g__gzt_rubric_title_tl
3479 }
3480 ]
3481 []
3482 {}
3483 {
3484 \bool_if:nF {
3485 \g__gzt_rearviewmirror_rubric_bool || \g__gzt_books_rubric_bool
3486 }{
3487 \adjustbox{raise={\c__gzt_header_yshift_dim}{\height}}{
3488 \bfseries\color{__gzt_head_text_color}\g__gzt_short_title_tl
3489 }
3490 }
3491 }
3492 {
3493 \tikz[remember~ picture,overlay] {\g__gzt_mainmatter_oddpage_headrule_tl}
3494 }
3495 \bool_if:nTF { \g__gzt_for_authors_bool } {
3496 \setfoot
3497 [\c__gzt_footer_size_font_tl\thepage]
3498 [
3499 \c__gzt_footer_string_tl
3500 ]
3501 [\c__gzt_compiled_string_tl]
3502 {\c__gzt_compiled_string_tl}
3503 {
3504 \c__gzt_footer_string_tl
3505 }
3506 {\c__gzt_footer_size_font_tl\thepage}
3507 }{
3508 \setfoot
3509 [\c__gzt_footer_size_font_tl\thepage]
3510 [
3511 \c__gzt_footer_string_tl
3512 ]
3513 []
3514 {}
3515 {

```

```

3516     \c__gzt_footer_string_tl
3517   }
3518   {\c__gzt_footer_size_font_tl\thepage}
3519 }
3520 }

```

We define a public macro for possible acknowledgements to be used by author(s) of articles.

```

3521 \NewDocumentCommand \acknowledgements { +m } {
3522   \__gzt_article_acknowledgements:n {#1}
3523 }

```

`\printminibios` We define the public command which displays

- the affiliation(s), email(s) and minibiographie(s) of the authors,
- the acknowledgements if not empty.

```

3524 \NewDocumentCommand \printminibios { s } {
3525   \bool_if:NT {\g__gzt_multicols_bool} {
3526     \end{multicols}
3527   }

```

We force all the previous floats to be processed no later on the page following the beginning of the bibliography, CV or acknowledgements.

```

3528 \FloatBarrier
3529 \begin{\__gzt_minibiographies_acknowledgements_tcbox}
3530   \nopagebreak[0]
3531   \IfBooleanF {#1}
3532   {
3533     \__gzt_display_people_by_role:n { author-art-\int_use:N \g__gzt_articles_int }
3534   }
3535   \DTLsaveLastrowcount{\__gzt_authors_number}
3536   \tl_if_empty:NF \l__gzt_article_acknowledgements_tl
3537   {
3538     \footnotesize
3539     \int_compare:nNnT {\__gzt_authors_number}>{0}
3540     {
3541       \par

```



```

3542     \bigskip
3543   }
3544   \begin{adjustbox}{valign=t,minipage=\linewidth}
3545     \color{__gzt_acknowledgements_color}
3546     \setlength{\parskip}{\c__gzt_mainmatter_parskip_skip}
3547     \l__gzt_article_acknowledgements_tl
3548   \end{adjustbox}
3549 }
3550 \bool_gset_true:N \g__gzt_previous_article_with_bibliography_or_minibio_bool
3551 \end{__gzt_minibiographies_acknowledgements_tcbox}
3552 }

```

(End definition for `\printminibios`. This function is documented on page ??.)

`\printbibliography` The command for bibliography printing production is redefined in order to let it silently:

- beforehand quit the multicolumn environment and enter in the `__bibliography_tcbox` environment (which gives a special layout to bibliographies, CV and acknowledgements),
- afterwards quit the `bibliography_minibiographies_acknowledgements` environment and enter in the multicolumn environment.

```

3553 \cs_set_eq:NN \__gzt_printbibliography \printbibliography
3554 \RenewDocumentCommand \printbibliography { s O{} } {
3555   \bool_if:NT {\g__gzt_multicols_bool} {
3556     \end{multicols}
3557   }

```

We force all the previous floats to be processed no later on the page following the beginning of the bibliography, CV or acknowledgements.

```

3558 % \afterpage{
3559   \FloatBarrier
3560 % }
3561 \begin{__gzt_bibliography_tcbox}
3562   \__gzt_printbibliography[heading=subbibliography,resetnumbers,#2]
3563 \end{__gzt_bibliography_tcbox}
3564 \nopagebreak[0]

```

```

3565 \IfBooleanTF {#1}
3566 {
3567   \printminibios*
3568 }{
3569   \printminibios
3570 }
3571 }

```

(End definition for `\printbibliography`. This function is documented on page ??.)

### 2.33 Miscellaneous private commands specific to the journal

We create miscellaneous private commands specific to the journal.

Command for centuries.

```

3572 \deftranslation[to=French]{__gzt_century}{si\`ecle}
3573 \deftranslation[to=English]{__gzt_century}{century}
3574 \deftranslation[to=French]{__gzt_first}{\ier}
3575 \deftranslation[to=English]{__gzt_first}{\up{st}\xspace}
3576 \deftranslation[to=French]{__gzt_nth}{\ieme}
3577 \deftranslation[to=English]{__gzt_nth}{\up{th}\xspace}
3578 \deftranslation[to=French]{__gzt_bc}{avant~ J.-C}
3579 \deftranslation[to=English]{__gzt_bc}{BC}
3580 \cs_new_protected:Nn \__gzt_century:n
3581 {
3582   \textsc{
3583     \int_to_roman:n {\int_abs:n {#1}}
3584   }
3585   \int_compare:nNnTF { \int_abs:n {#1} } > { 1 } {\translate{__gzt_nth}}{\translate{__gzt_first}}
3586 }
3587 \cs_new_protected:Nn \__gzt_century_suffix:n
3588 {
3589   \translate{__gzt_century}
3590   \int_compare:nNnT { #1 } < { 0 }{
3591     \c_space_tl
3592     \translate{__gzt_bc}

```

In case of French language, we add a period just after “avant J.-C”, but only if the character following the `\century` macro is not a period itself.

```
3593 \IfLanguageName {french}{
3594   \@ifnextchar.
3595   {
3596   }{
3597     .\xspace
3598   }
3599 }
3600 }{
3601 }
3602 }

3603 </class | class-article>

3604 <*class>
```

## 2.34 Miscellaneous public commands specific to the journal

We create miscellaneous public commands specific to the journal.

`\advertisement` For a (not full page) advertisement.

```
3605 \cs_new_protected:Nn \__gzt_advertisement:nn
3606 {
3607   \vfill
3608   \begin{center}
3609     \dim_set:Nn \fboxsep {\c_zero_dim}
3610     \fbox{
3611       \includegraphics[max~ size={\linewidth}{\textheight},#1]{#2}
3612     }
3613   \end{center}
3614   \vfill
3615 }
3616 \NewDocumentCommand \advertisement { 0{} m }
3617 {
3618   \__gzt_advertisement:nn {#1}{#2}
```

```

3619 }
3620 % \end{macro}
3621 %
3622 % \begin{macro}{\fullpageadvertisement}
3623 %   For a full page advertisement.
3624 %   \begin{macrocode}
3625 \cs_new_protected:Nn \__gzt_fullpageadvertisement:nn
3626 {
3627   \newpage
3628   \thispagestyle{\__gzt_advertisement_ps}
3629   \begin{minipage}[c][\textheight][c]{\textwidth}
3630     \centering\includegraphics[max~ size={\linewidth}{\textheight},#1]{#2}
3631   \end{minipage}
3632 }
3633 \NewDocumentCommand \fullpageadvertisement { 0{ } m }
3634 {
3635   \__gzt_fullpageadvertisement:nn {#1}{#2}
3636 }
3637 % \end{macro}
3638 %
3639 % \begin{macro}{\aboutfrontcover}
3640 %   For a few words about the front cover.
3641 %   \begin{macrocode}
3642 \NewDocumentCommand \aboutfrontcover { 0{ } 0{\c__gzt_about_frontcover_string_tl} m }
3643 {
3644   \__gzt_about_frontcover:nnn {#1}{#2}{#3}
3645 }

```

*(End definition for \advertisement. This function is documented on page ??.)*

```

3646 \cs_new_protected:Nn \__gzt_prepare_rubric:nnn {
3647   \newpage
3648   \tl_gclear:N \g__gzt_rubric_abstract_tl
3649   \tl_gset:Nn \g__gzt_rubric_title_tl {#2}
3650   \tl_gset:Nn \g__gzt_rubric_pictofile_tl {#3}
3651   \IfNoValueF {#1}
3652   {
3653     \keys_set:nn { gzt/rubric } { #1 }

```

```

3654 }
3655 \__gzt_rubric:nnn
3656 {\g__gzt_rubric_abstract_tl}{\g__gzt_rubric_title_tl}{\g__gzt_rubric_pictofile_tl}
3657 }

```

`\rubric` For a “free” rubric. In case of special edition, we set the rubric title first as empty and then as the special edition’s title plus a constant string. Otherwise, this title is freely set.

```

3658 \NewDocumentCommand \rubric {0{}mm}
3659 {
3660   \bool_if:NTF {\g__gzt_special_edition_bool} {
3661     \__gzt_rubric:nnn {#1}{#2}{#3}
3662     \tl_gset:Nn \g__gzt_rubric_title_tl {
3663       \c__gzt_short_special_edition_string_tl
3664       \c_space_tl
3665       \g__gzt_special_edition_title_tl
3666     }
3667   }{
3668     \__gzt_rubric:nnn {#1}{#2}{#3}
3669   }
3670 }

```

*(End definition for \rubric. This function is documented on page ??.)*

```

\mathematics
  \dossier
\community
  \interview
  \teaching
  \parity
  \tellme
\information
\rearviewmirror
  \tribute
  \books
\largetips
  \forum
\moralreport

```

```

3671 \NewDocumentCommand \mathematics {0{}}
3672 {
3673   \__gzt_rubric:nnn {#1}{\c__gzt_mathematics_rubric_string_tl}{\c__gzt_mathematics_pictogram_file_name_tl}
3674 }
3675 \NewDocumentCommand \dossier {0{}}
3676 {
3677   \__gzt_rubric:nnn {#1}{\c__gzt_dossier_rubric_string_tl}{\c__gzt_dossier_pictogram_file_name_tl}
3678 }
3679 \NewDocumentCommand \community {0{}}
3680 {
3681   \__gzt_rubric:nnn {#1}{\c__gzt_community_rubric_string_tl}{\c__gzt_hands_pictogram_file_name_tl}
3682 }

```

```

3683 \NewDocumentCommand \interview {0{}}
3684 {
3685   \__gzt_rubric:nnn {#1}{\c__gzt_interview_rubric_string_tl}{\c__gzt_interview_pictogram_file_name_tl}
3686   \bool_gset_true:N \g__gzt_interview_rubric_bool
3687 }
3688 \NewDocumentCommand \teaching {0{}}
3689 {
3690   \__gzt_rubric:nnn {#1}{\c__gzt_teaching_rubric_string_tl}{\c__gzt_teaching_pictogram_file_name_tl}
3691 }
3692 \NewDocumentCommand \parity {0{}}
3693 {
3694   \__gzt_rubric:nnn {#1}{\c__gzt_parity_rubric_string_tl}{\c__gzt_parity_pictogram_file_name_tl}
3695 }
3696 \NewDocumentCommand \tellme {0{}}
3697 {
3698   \__gzt_rubric:nnn {#1}{\c__gzt_tellme_rubric_string_tl}{\c__gzt_tellme_pictogram_file_name_tl}
3699   \bool_gset_true:N \g__gzt_tellme_rubric_bool
3700 }
3701 \NewDocumentCommand \information {0{}}
3702 {
3703   \__gzt_rubric:nnn {#1}{\c__gzt_information_rubric_string_tl}{\c__gzt_information_pictogram_file_name_tl}
3704 }
3705 \NewDocumentCommand \rearviewmirror {0{}}
3706 {
3707   \__gzt_rubric:nnn {#1}{\c__gzt_rearviewmirror_rubric_string_tl}{\c__gzt_rearviewmirror_pictogram_file_name_tl}
3708   \bool_gset_true:N \g__gzt_rearviewmirror_rubric_bool
3709 }
3710 \NewDocumentCommand \tribute {0{}}
3711 {
3712   \__gzt_rubric:nnn {#1}{\c__gzt_tribute_rubric_string_tl}{\c__gzt_tribute_pictogram_file_name_tl}
3713 }
3714 \NewDocumentCommand \books {0{}}
3715 {
3716   \__gzt_rubric:nnn {#1}{\c__gzt_books_rubric_string_tl}{\c__gzt_books_pictogram_file_name_tl}
3717   \bool_gset_true:N \g__gzt_books_rubric_bool
3718   \vspace{1.5\c__gzt_book_review_frontcover_extend_dim}
3719 }
3720 \NewDocumentCommand \latextips {0{}}

```

```

3721 {
3722   \__gzt_rubric:nnn {#1}{\c__gzt_latex_rubric_string_tl}{ }
3723 }
3724 \NewDocumentCommand \forum {0{}}
3725 {
3726   \__gzt_rubric:nnn {#1}{\c__gzt_forum_rubric_string_tl}{\c__gzt_forum_pictogram_file_name_tl}
3727 }
3728 \NewDocumentCommand \moralreport {0{}}
3729 {
3730   \__gzt_rubric:nnn {#1}{\c__gzt_moralreport_rubric_string_tl}{\c__gzt_smf_logo_file_string_tl}
3731 }

```

*(End definition for \mathematics and others. These functions are documented on page ??.)*

```

3732 \endclass

```

```

3733 \class | class-article

```

`\email`

```

3734 \DeclareCiteCommand{\citeinterviewee}{ }{
3735   \printnames{interviewee}
3736 }
3737 {}{}
3738 \DeclareCiteCommand{\citereviewer}{ }{
3739   \g__gzt_blx_given_first_inits_false_tl
3740   \printnames{reviewer}
3741 }
3742 {}{}
3743 \DeclareCiteCommand{\citereviewerinstitution}{ }{
3744   \printlist{reviewerinstitution}
3745 }
3746 {}{}
3747 \DeclareCiteCommand{\__gzt_cite_public_price}{ }{
3748   \printfield{publicprice}
3749 }
3750 {}{}
3751 \DeclareCiteCommand{\__gzt_cite_smf_price}{ }{

```

```

3752 \printfield{smfprice}
3753 }
3754 {}{}
3755 \DeclareCiteCommand{\citecopublisher}{}{
3756 \printlist{copublisher}
3757 }
3758 {}{}
3759 \DeclareCiteCommand{\citefrenchabstract}{}{
3760 \printfield{frenchabstract}
3761 }
3762 {}{}
3763 \DeclareCiteCommand{\__gzt_cite_englishabstract}{}{
3764 \printfield{englishabstract}
3765 }
3766 {}{}

```

*(End definition for \email. This function is documented on page ??.)*

`\email` For typesetting an email.

```

3767 \NewDocumentCommand \email {m}
3768 {
3769 \__gzt_email:n {#1}
3770 }
3771 % \end{macro}
3772 %
3773 % \begin{macro}{\question}
3774 % We define a private function for the questions/answers of interviews.
3775 % \begin{macrocode}
3776 \cs_new_protected:Nn \__gzt_question:n
3777 {
3778 \int_incr:N \g__gzt_question_int
3779 {
3780 \par
3781 \bigskip
3782 \color{\__gzt_question_color}
3783 #1
3784 \par

```



```

3785   }
3786 }
3787 \NewDocumentCommand \question {m}
3788 {
3789   \__gzt_question:n {#1}
3790 }

```

*(End definition for \email. This function is documented on page ??.)*

**\smf**

```

3791 \NewDocumentCommand \smf { s } {
3792   \IfBooleanTF {#1}
3793   {
3794     \g__gzt_smf_string_tl
3795   }
3796   {
3797     \g__gzt_smf_short_string_tl
3798   }
3799   \xspace
3800 }

```

*(End definition for \smf. This function is documented on page ??.)*

**\surname**

```

3801 \DeclareExpandableDocumentCommand \surname { m } {
3802   \textsc{#1}
3803 }

```

*(End definition for \surname. This function is documented on page ??.)*

**\cad**

**\Cad**

```

3804 \NewDocumentCommand \cad { s } {
3805   \IfBooleanTF {#1}
3806   {
3807     \c__gzt_cad_string_tl

```

```

3808 }
3809 {
3810   \c__gzt_cad_short_string_tl
3811 }
3812 \xspace
3813 }
3814 \NewDocumentCommand \Cad { s } {
3815   \IfBooleanTF {#1}
3816   {
3817     \c__gzt_Cad_string_tl
3818   }
3819   {
3820     \c__gzt_Cad_short_string_tl
3821   }
3822   \xspace
3823 }

```

*(End definition for \cad and \Cad. These functions are documented on page ??.)*

\gzt

```

3824 \NewDocumentCommand \gzt { s } {
3825   \IfBooleanTF {#1}
3826   {
3827     \l__gzt_gzt_string_tl
3828   }
3829   {
3830     \l__gzt_gzt_short_string_tl
3831   }
3832   \xspace
3833 }

```

*(End definition for \gzt. This function is documented on page ??.)*

\gztcl

\gztarticle

```

3834 \NewDocumentCommand \gztcl {}
3835 {

```

```

3836 \textsl{\texttt{\c__gzt_class_name_tl}}
3837 \xspace
3838 }
3839 \NewDocumentCommand \gztarticlecl {}
3840 {
3841 \textsl{\texttt{\c__gzt_article_class_name_tl}}
3842 \xspace
3843 }

```

*(End definition for \gztcl and \gztarticle. These functions are documented on page ??.)*

`\century`

```

3844 \NewDocumentCommand \century { s m } {
3845 \__gzt_century:n {#2}
3846 \IfBooleanTF {#1}
3847 {
3848 \int_compare:nNnT { #2 } < { 0 }{
3849 \__gzt_century_suffix:n {#2}
3850 }
3851 }
3852 {
3853 \__gzt_century_suffix:n {#2}
3854 }
3855 }

```

*(End definition for \century. This function is documented on page ??.)*

`\aside`

```

3856 \NewDocumentCommand \aside { s m } {
3857 \IfBooleanTF {#1}
3858 {
3859 \c__gzt_aside_string_tl{}~ #2
3860 }
3861 {
3862 \c__gzt_aside_string_tl{}~ #2~ \c__gzt_aside_string_tl
3863 }

```

```
3864 }
```

*(End definition for \aside. This function is documented on page ??.)*

```
3865 \tl_new:N \g__gzt_font_designer_text_tl
3866 \cs_new_protected:Nn \__gzt_font_designer_text:n
3867 {
3868   \tl_gset:Nn \g__gzt_font_designer_text_tl { #1 }
3869 }
3870 \NewDocumentCommand \fontdesignertext {m}
3871 {
3872   \__gzt_font_designer_text:n {#1}
3873 }
```

```
3874 \tl_new:N \g__gzt_printer_text_tl
3875 \cs_new_protected:Nn \__gzt_printer_text:n
3876 {
3877   \tl_gset:Nn \g__gzt_printer_text_tl { #1 }
3878 }
3879 \NewDocumentCommand \printertext {m}
3880 {
3881   \__gzt_printer_text:n {#1}
3882 }
```

Command for epigraphs.

```
3883 \renewcommand{\textflush}{flushepinormal}
3884 \cs_set_eq:NN \__gzt_orig_epigraph \epigraph
3885 \cs_new_protected:Nn \__gzt_epigraph:nn
3886 {
3887   \bool_if:nTF { \tl_if_empty_p:n {#2} }
3888   {
3889     \setlength{\epigraphrule}{\c_zero_dim}
3890   }
3891   {
3892     \setlength{\epigraphrule}{.4\p@}
3893   }
3894   \__gzt_orig_epigraph{
```

```

3895 \emph{
3896   \enquote{
3897     #1
3898   }
3899 }
3900 }
3901 {
3902   #2
3903 }
3904 }
3905 \RenewDocumentCommand \epigraph { m m }
3906 {
3907   \__gzt_epigraph:nn {#1}{#2}
3908 }

3909 \NewDocumentEnvironment{authorsinstructions}{}
3910 {
3911   \begingroup
3912   \tcbverbatimwrite{\c__gzt_authors_instructions_file_tl}
3913 }
3914 {
3915   \endtcverbatimwrite
3916   \endgroup
3917 }

```

We provide some public commands and environments to be used for displaying (mainly L<sup>A</sup>T<sub>E</sub>X) code.

```

3918 \lstdefinestyle{\__gzt_lst_style}{
3919   escapechar=+,
3920   language=[LaTeX]TeX,
3921   texcsstyle=*\bfseries,
3922   breaklines=true,
3923   basicstyle=\normalfont\ttfamily,
3924   columns=flexible,
3925   inputencoding=utf8/latin1
3926 }
3927 \DeclareTotalTCBox{\gztverb}{ v }{verbatim,blank,fuzzy~ halo=0pt~ with~ __gzt_light_generic_dark_color!8}{#1}

```

The optional argument declaration must be prefixed with an ! (see <https://github.com/T-F-S/tcolorbox/issues/43>).

```
3928 \NewTCBListing{gztcode}{!0}{ }{
3929   listing~ style=__gzt_lst_style,
3930   listing~ only,
3931   enlarge~ top~ by=\medskipamount,
3932   breakable,
3933   #1
3934 }
```

We provide public environments `gztfigure` and `gzttable` (and friends) for the usual floats. Their layout is based upon `tcolorbox` features.

```
3935 \DeclareTColorBox[blend~ into=figures]{gztfigure}{0}{ }
3936 {
3937   ,width=\linewidth
3938   ,blend~ before~ title=dash
3939   ,__gzt_tcb_floats_style
3940   ,#1
3941   ,code={\ifdefempty{\kv tcb@title}{\tcbset{__gzt_tcb_notitle}}{}}
3942 }
3943 \DeclareTColorBox[blend~ into=figures]{gztfigure*}{0}{ }
3944 {
3945   ,float*
3946   ,blend~ before~ title=dash
3947   ,width=\textwidth
3948   ,__gzt_tcb_floats_style
3949   ,#1
3950   ,code={\ifdefempty{\kv tcb@title}{\tcbset{__gzt_tcb_notitle}}{}}
3951 }
3952 \DeclareTColorBox[blend~ into=tables]{gzttable}{0}{ }
3953 {
3954   ,width=\linewidth
3955   ,blend~ before~ title=dash
3956   ,__gzt_tcb_floats_style
3957   ,#1
3958   ,code={\ifdefempty{\kv tcb@title}{\tcbset{__gzt_tcb_notitle}}{}}
3959 }
```

```

3960 \DeclareTColorBox[blend~ into=tables]{gzttable*}{ 0{ } }
3961 {
3962   ,float*
3963   ,blend~ before~ title=dash
3964   ,width=\textwidth
3965   ,__gzt_tcb_floats_style
3966   ,#1
3967   ,code={\ifdefempty{\kvtcb@title}{\tcbset{__gzt_tcb_notitle}}{}}
3968 }
3969 \DeclareTColorBox{gztfame}{ 0{ } }
3970 {
3971   ,width=\linewidth
3972   ,__gzt_tcb_floats_style
3973   ,#1
3974 }
3975 \DeclareTColorBox{gztfame*}{ 0{ } }
3976 {
3977   ,float*
3978   ,width=\textwidth
3979   ,__gzt_tcb_floats_style
3980   ,#1
3981 }
3982 %
3983 \DeclareTColorBox{gztscan}{ 0{ } }
3984 {
3985   #1
3986   ,width=\textwidth
3987   ,__gzt_tcb_floats_style
3988   ,size=tight
3989 }
3990 \DeclareTColorBox{__gzt_book_review}{ 0{ } }
3991 {
3992   overlay~ unbroken~ and~ first={
3993     \node at (frame.north~ west) {
3994       {
3995         \makebox[\c_zero_dim][l]{
3996           \adjustbox{raise={-2\height+\c__gzt_book_review_frontcover_extend_dim}}{\c_zero_dim}}{
3997             \includegraphics[width=20mm]{\g__gzt_bookreview_frontcover_tl}

```

```

3998     }
3999   }
4000 }
4001 };
4002 },
4003 __gzt_tcb_book_review_box_style,
4004 #1
4005 }
4006 \DeclareTColorBox{__gzt_bibliography_tcbox}{ 0{ } }
4007 {
4008   __gzt_tcb_bibliography_style,
4009   #1
4010 }
4011 \DeclareTColorBox{__gzt_minibiographies_acknowledgements_tcbox}{ 0{ } }
4012 {
4013   __gzt_tcb_minibiographies_acknowledgements_style,
4014   #1
4015 }

```

We provide a public environment `inset` for insets that has the same layout as minibiographies and acknowledgements. Its layout is based upon `tcolorbox` features.

```

4016 \DeclareTColorBox{inset}{ 0{ } }
4017 {
4018   __gzt_tcb_minibiographies_acknowledgements_style,
4019   #1
4020 }

```

We create a `bookreview` environment for the book reviews.

```

4021 \NewDocumentEnvironment{bookreview}{ 0{ } m }
4022 {
4023   \keys_set:nn { gzt/bookreview } { #2 }
4024   \begin{__gzt_book_review}[#1]
4025     \xpatchfieldformat{title}{\mkbibemph}{\textbf}}{}{}
4026     \xpretonameformat{author}{\color{__gzt_people_color}}{}{}
4027     \g__gzt_blx_given_first_inits_false_tl
4028     \noindent

```



```

4029   \parbox[] [21.5mm] [l]{\linewidth}{\fullcite{\g__gzt_bookreview_bibkey_tl}}
4030   \tcblower
4031 }{
4032 \begin{flushright}
4033   % \g__gzt_reviewer_tl
4034   \bigskip
4035   \citereviewer{\g__gzt_bookreview_bibkey_tl}\
4036   \citereviewerinstitution{\g__gzt_bookreview_bibkey_tl}
4037 \end{flushright}
4038   % \vspace*{10mm}
4039   \mbox{}
4040 \end{\gzt_book_review}
4041 }

4042 \DeclareTColorBox{__gzt_book_advertisement}{ 0{ } }
4043 {
4044   __gzt_tcb_book_advertisement_box_style,
4045   #1
4046 }
4047 \DeclareTColorBox{__gzt_inside_cover_tcb}{ 0{ } }
4048 {
4049   #1
4050 }

```

We create a `bookadvertisement` environment for the book advertisements.

```

4051 \NewDocumentCommand \bookadvertisement {0{ } m}
4052 {
4053   \newpage{}
4054   \mbox{}
4055   \vfill
4056   \begin{__gzt_book_advertisement}[#1]
4057     \fullcite{#2}
4058     \par
4059     \bigskip
4060     \tcblower
4061     \includegraphics[height=22.5mm]{\c__gzt_smf_logo_file_string_tl}
4062     \par{}

```

```

4063     \smallskip
4064     \url{\l__gzt_journal_url_tl}
4065 \end{__gzt_book_advertisement}
4066 \vfill
4067 \newpage
4068 \bool_gset_false:N \g__gzt_advertisement_bool
4069 \bool_gset_true:N \g__gzt_mainmatter_bool
4070 }

4071 </class | class-article>

4072 <*class>

```

We create a variant of the `\input` macro which cleans the local customizations if any and, if necessary open and close the `refsection` and `multicols` environments.

```

4073 \NewDocumentCommand \gztinput { m m } {
4074   \tl_gclear:N \g__gzt_people_affiliation_tl
4075   \tl_gclear:N \g__gzt_people_email_tl
4076   \tl_gclear:N \g__gzt_people_minibio_tl
4077   \tl_gclear:N \g__gzt_people_photo_tl
4078   \tl_gclear:N \g__gzt_people_webpage_tl
4079   \tl_clear:N \l__gzt_article_acknowledgements_tl
4080   \startcustomization
4081   \bool_if:NF {\g__gzt_refsection_bool} {
4082     \begin{refsection}
4083   }
4084   \bool_if:NF { \g__gzt_backcover_bool } {
4085     \tl_if_in:NnT
4086       { \c__gzt_advertisement_directory_string_tl } { #1 } {
4087       \newpage
4088       \thispagestyle{\g__gzt_advertisement_ps}
4089     }
4090   }
4091   \inputfrom{#1}{#2}
4092   \bool_if:NT {\g__gzt_multicols_bool} {
4093     \end{multicols}
4094   }

```

```

4095 \bool_if:NT {\g__gzt_refsection_bool} {
4096   \end{refsection}
4097 }
4098 \cleancustomization
4099 }

```

If we don't ask the cover page (only), the inside back cover and back cover pages are automatically included at the end of the document, the former containing some condensed instructions to authors. But, this cannot be done within `\AddToHook{enddocument}` and `\preto\@enddocumenthook` should be used instead (see <https://tex.stackexchange.com/q/240318/18401>). (Update (2021-02-14): we now rely on the new `\AddToHook{env/document/end}`.)

```

4100 \bool_if:NF {\g__gzt_coverpage_bool} {
4101   \bool_if:NF {\g__gzt_inside_pages_bool} {
4102     \AddToHook{enddocument}{
4103       \bool_gset_true:N \g__gzt_backmatter_bool
4104       \g__gzt_display_inside_backcover_tl
4105       \newpage
4106       \g__gzt_display_backcover_tl
4107     }
4108   }
4109 }

```

If we don't ask the cover page (only), the document total page numbers should be a multiple of four and we add the necessary and sufficient number of blank pages if it isn't the case (code borrowed from <https://tex.stackexchange.com/a/83498/18401>).

```

4110 \bool_if:NF {\g__gzt_coverpage_bool} {
4111   \bool_if:nF { \g__gzt_for_authors_bool } {
4112     \bool_if:nT { \g__gzt_inside_pages_bool } {
4113       \AddToHook{enddocument}{
4114         \prg_replicate:nn
4115         { \int_mod:nn { 4 - \int_mod:nn { \getpagerefnumber{LastPage} } { 4 } } { 4 } }
4116         { \thispagestyle{\gzt_blank_pages_ps}\null\clearpage }
4117       }
4118     }
4119   }
4120 }

4121 </class>

```

```

4122 <*class-article>
4123 \ProcessKeysOptions { gztarticle }
4124 \AddToHook{enddocument}{
4125   \bool_if:NT {\g__gzt_multicols_bool} {
4126     \end{multicols}
4127   }
4128   \bool_if:NT {\g__gzt_refsection_bool} {
4129     \end{refsection}
4130   }
4131 }
4132 </class-article>
4133 <*class | class-article>

```

## 2.35 Miscellaneous settings

We gather here miscellaneous settings.

### 2.35.1 Related to `pgfplots` package

(French) Numbers format:

```

4134 \pgfplotsset{
4135   /pgf/number~ format/.cd,
4136   use~ comma,
4137   1000~ sep={\,},
4138   min~ exponent~ for~ 1000~ sep=4
4139 }

```

### 2.35.2 Related to `biblatex` package

```

4140 \defbibheading{bibassection}[\bibname]{\section*{#1}}
4141 \renewcommand{\bibfont}{\normalfont\footnotesize}

```

As bibliographic resource, we add the file of the current issue.

```
4142 \exp_after:wN\addbibresource\exp_after:wN{\c_gzt_issue_bib_path_string_tl}
```

We create a name format that prints the initial(s) of the first name(s) before last name of a cited author.

```
4143 \@ifpackagelater{biblatex}{2016/01/01}{
4144   \DeclareNameFormat{giveninits-last}{
4145     \nameparts{#1}
4146     \usebibmacro{name:given-family}
4147     {\namepartfamily}
4148     {\namepartgiveni}
4149     {\namepartprefix}
4150     {\namepartsuffix}
4151     \usebibmacro{name:andothers}
4152   }
4153 }{
4154   \DeclareNameFormat{giveninits-last}{
4155     \usebibmacro{name:first-last}{#1}{#4}{#5}{#7}
4156     \usebibmacro{name:andothers}
4157   }
4158 }
4159 \DeclareNameAlias{labelname}{giveninits-last}
```

We ensure the space between initial(s) and last name is unbreakable.

```
4160 \renewcommand*\bibnamedelimc{\addnbspace}
4161 \renewcommand*\bibnamedelimd{\addnbspace}

4162 \renewbibmacro{in:}{
4163   \ifentrytype{article}{}{\printtext{\bibstring{in}\intitlepunct}}
4164   \renewbibmacro*{journal}{
4165     \iffieldundef{shortjournal}
4166     {
4167       \iffieldundef{journaltitle}
4168       {}
4169       {
4170         \printtext[journaltitle]
4171         {
4172           \printfield[titlecase]{journaltitle}
4173           \setunit{\subtitlepunct}

```

```

4174         \printfield[titlecase]{journalsubtitle}
4175     }
4176 }
4177 }
4178 {\printtext[journaltitle]{\printfield[titlecase]{shortjournal}}}
4179 }
4180 \renewbibmacro*{volume+number+eid}{
4181     \printfield{volume}
4182     \setunit{\addcomma\c_space_tl}
4183     \printfield{number}
4184     \setunit{\addcomma\c_space_tl}
4185     \printfield{eid}}
4186 \DeclareFieldFormat[article]{volume}{\mkbibbold{#1}}
4187 \DeclareFieldFormat[book]{volume}{\mkbibbold{#1}}
4188 \DeclareFieldFormat[article]{number}{\bibstring{number}#1}
4189 \DeclareLanguageMapping{french}{gzt}

```

### 2.35.3 Related to **kpfonts** package

We replace the kpfonts' "mathfrak" by the one from "eufrak", as the former doesn't provide Euler Fraktur digits.

```

4190 \DeclareMathAlphabet\mathfrak{U}{euf}{m}{n}
4191 \SetMathAlphabet\mathfrak{bold}{U}{euf}{b}{n}

```

### 2.35.4 Related to **draftwatermark** package

```

4192 \@ifpackageloaded{draftwatermark}{
4193     \SetWatermarkColor{gray!10}
4194     \SetWatermarkFontSize{30mm}
4195     \SetWatermarkText{\text_uppercase:n{\c__gzt_draftwatermark_string_tl}}
4196 }{
4197 }

```

### 2.35.5 Related to **TikZ** package

```

4198 \tikzset{
4199     __gzt_dots/.style={
4200         line~ width=\c__gzt_tikz_dot_diameter_dim,
4201         line~ cap=round,

```

```

4202   dash~ pattern=on~ 0pt~ off~ \c__gzt_tikz_dot_spacing_dim
4203 },
4204 __gzt_tcb_segmentation_style/.style={
4205   __gzt_dots,
4206   draw=__gzt_dotfill_color,
4207   shorten~ >=~ \c__gzt_tcb_left_dim+\c__gzt_tcb_boxsep_dim,
4208   shorten~ <=~ \c__gzt_tcb_left_dim+\c__gzt_tcb_boxsep_dim,
4209 }
4210 }

```

### 2.35.6 Related to `tcolorbox` package

We set some styles for

- the two public environments `gztfigure(*)` and `gzttable(*)` for the usual floats,
- the book reviews,
- the book advertisements,
- the inside frontcover,

whom layout is based upon `tcolorbox` features.

```

4211 \tcbset{
4212   copyright/.style={
4213     overlay={
4214       \node[rotate=90,anchor=south~ west,font=\tiny] at (frame.south~ east) {
4215         \begin{minipage}[t]{\tcbtextheight}
4216           \copyright{}~ #1
4217         \end{minipage}
4218       };
4219     }
4220   }
4221 }
4222 \tcbset{
4223   __gzt_tcb_floats_style/.style={
4224     enhanced
4225     ,every~ float=\centering
4226     ,coltitle=__gzt_generic_dark_color

```

```

4227     ,colbacktitle=__gzt_float_title_bg_color
4228     ,colback=white
4229     ,colframe=__gzt_float_frame_color
4230     ,center~ upper
4231     ,sharp~ corners=all
4232     ,boxrule=0.3mm
4233   }
4234 }
4235 \tcbset{
4236   __gzt_tcb_notitle/.style={
4237     blend~ before~ title~ code={##1}
4238     ,title={\c_space_tl}
4239   }
4240 }
4241 \tcbset{
4242   __gzt_tcb_book_review_box_style/.style={
4243     enhanced,
4244     colback=__gzt_book_review_frame_bg_color,
4245     breakable,
4246     % height=50mm,
4247     boxrule=\c_zero_dim,
4248     sharp~ corners=all,
4249     skin=enhancedlast,
4250     leftupper=25mm,
4251     enlarge~ bottom~ finally~ by=-1mm,
4252     middle=4mm,
4253     segmentation~ style={__gzt_tcb_segmentation_style}
4254   }
4255 }
4256 \tcbset{
4257   __gzt_tcb_book_advertisement_box_style/.style={
4258     enhanced,
4259     colframe=__gzt_book_advertisement_frame_color,
4260     colback=__gzt_book_advertisement_bg_color,
4261     center~ lower,
4262     sharp~ corners=all,
4263     % skin=enhancedlast,
4264     % middle=4mm,

```



```

4265     lower~ separated=false,
4266     % segmentation~ style={__gzt_tcb_segmentation_style}
4267 }
4268 }
4269 \tcbset{
4270   __gzt_tcb_inside_cover_style/.style={
4271     % split=0.6,
4272     colback=__gzt_inside_frontcover_frame_bg_color,
4273     colbacktitle=__gzt_inside_frontcover_frame_bg_color,
4274     sharp~ corners=all,
4275     center~ title,
4276     coltitle=__gzt_inside_frontcover_frame_title_color,
4277     fonttitle=\bfseries\large,
4278     boxrule=\c_zero_dim,
4279     toptitle=3mm,
4280     bottomtitle=4mm,
4281     frame~ hidden,
4282     enhanced,
4283     height=\c__gzt_layoutheight_dim-\c__gzt_topmargin_inside_cover_dim-\c__gzt_botmargin_dim,
4284     width=\c__gzt_inside_cover_box_width_dim,
4285     middle=4mm,
4286     segmentation~ style={__gzt_tcb_segmentation_style}
4287   },
4288   __gzt_tcb_inside_frontcover_style/.style={
4289     __gzt_tcb_inside_cover_style,
4290     enlarge~ left~ by=-\c__gzt_inside_cover_offset_dim,
4291   },
4292   __gzt_tcb_inside_backcover_style/.style={
4293     __gzt_tcb_inside_cover_style,
4294     enlarge~ left~ by=\c__gzt_inside_cover_offset_dim,
4295   }
4296 }
4297 \AddToHook{begindocument/before}{
4298   \bool_if:NTF {\g__gzt_special_edition_bool} {
4299     \tcbset{
4300       __gzt_tcb_inside_frontcover_style/.append~ style={
4301         title=\c__gzt_special_edition_editorial_board_string_tl
4302       },

```

```

4303     __gzt_tcb_inside_backcover_style/.append~ style={
4304         notitle
4305     },
4306 }
4307 }{
4308     \tcbset{
4309         __gzt_tcb_inside_frontcover_style/.append~ style={
4310             title=\c__gzt_editorial_board_string_tl
4311         },
4312         __gzt_tcb_inside_backcover_style/.append~ style={
4313             title=\file_if_exist:nT { \c__gzt_authors_instructions_file_tl } {
4314                 \c__gzt_authors_instructions_string_tl
4315             }
4316         },
4317     }
4318 }
4319 }
4320 \tcbset{
4321     __gzt_tcb_bibliography_style/.style={
4322         colback=__gzt_bibliography_minibios_acknowledgements_bg_color,
4323         breakable,
4324         boxrule=\c_zero_dim,
4325         sharp~ corners=all,
4326         enhanced
4327     }
4328 }
4329 \tcbset{
4330     __gzt_tcb_minibiographies_acknowledgements_style/.style={
4331         colback=__gzt_bibliography_minibios_acknowledgements_bg_color,
4332         breakable,
4333         boxrule=\c_zero_dim,
4334         extras~ unbroken~ and~ last={drop~ lifted~ shadow},
4335         sharp~ corners=all,
4336         skin=enhancedlast,
4337         height~ fixed~ for=middle,
4338     }
4339 }
4340 \tcbset{

```

```

4341 enlargepage~ flexible=\baselineskip,
4342 left=\c__gzt_tcb_left_dim,
4343 boxsep=\c__gzt_tcb_boxsep_dim,
4344 }

```

### 2.35.7 Lists

We now set the lists layout in order to benefit from `enumitem` package's features and preserve the layout from `frenchb`.

```

4345 \setlist[1]{labelindent=\parindent}
4346 \setlist[itemize]{label=\textendash{}, nosep}
4347 \setlist{
4348   labelwidth=\widthof{\textendash},
4349   itemsep=0.4ex plus 0.2ex minus 0.2ex,
4350   parsep=0.4ex plus 0.2ex minus 0.2ex,
4351   topsep=0.8ex plus 0.4ex minus 0.4ex,
4352   partopsep=0.4ex plus 0.2ex minus 0.2ex,
4353   leftmargin=!
4354 }

4355 \setlist[description]{
4356   font=
4357   \bool_if:nTF { \g__gzt_books_rubric_bool || \g__gzt_inside_frontcover_bool || \g__gzt_inside_backcover_bool }
4358   {
4359     \color{black}
4360   }{
4361     \color{__gzt_description_label_light_color}
4362   }
4363   \bfseries
4364 }

```

### 2.35.8 Miscellaneous

We fix the `csquotes`' quotes for PDF strings.

```

4365 \DeclarePlainStyle{«~ }{~ »}{`}{'}

```

We change the default settings of the floats placement.

```
4366 \setcounter{topnumber}{3}
4367 \renewcommand{\topfraction}{0.8}
```

We change the default vertical space between text and footnotes.

```
4368 \addtolength{\skip\footins}{.25\baselineskip}
```

We change the default horizontal space between columns in multicolumn mode.

```
4369 \setlength{\columnsep}{7mm}
```

We change the way the section counter is displayed (the chapter should not appear).

```
4370 \renewcommand{\thesection}{\arabic{section}}
```

In case `siunitx` package is loaded, we make it follow the French rules.

```
4371 \@ifpackageloaded{siunitx}{
4372   \sisetup{locale=FR}
4373 }
```

We change the color of the table rules.

```
4374 \arrayrulecolor{__gzt_arrayrule_color}
```

We change the floating table name (as translated by the `french-babel` module from `babel` package) from “Table” to “Tableau”.

```
4375 \addto\captionsfrench{\def\tablename{\scshape Tableau}}
```

## 2.36 Miscellaneous (re)definitions

We gather here miscellaneous redefinitions.

### 2.36.1 Vectors

Vectors, even written with `\vec`, are typeset with `esvect`’s `\vv`:

```
4376 \RenewDocumentCommand \vec { m } {
4377   \vv{#1}
4378 }
```

`\usetikzlibrary` The `\usetikzlibrary` switch is redefined in order to get rid of the bug reported here: <https://sourceforge.net/p/pgf/bugs/353/>.

```
4379 \cs_set_eq:NN \__gzt_orig_usetikzlibrary \usetikzlibrary
4380 \RenewDocumentCommand \usetikzlibrary { m } {
4381   \shorthandoff{:}
4382   \__gzt_orig_usetikzlibrary{#1}
4383   \shorthandon{:}
4384   % \begingroup
4385   % \NoAutoSpacing
4386   % \__gzt_orig_usetikzlibrary{#1}
4387   % \endgroup
4388 }
```

*(End definition for `\usetikzlibrary`. This function is documented on page ??.)*

### 2.36.2 Usual theorems and the like

Some usual theorems and the like are defined, thanks to `thmtools` package. First, we define a private function `\_@@_new_theorem` that defines:

1. a new (private, `thmtools`) theorem with 4 arguments:
  - (a) possible additional options to the style `_@@_tcb_alltheorems_style` defined earlier for all “theorems”,
  - (b) name of the (private) `thmtools` theorem,
  - (c) French title for this theorem,
  - (d) English title for this theorem.
2. a public environment based on this private theorem with a the usual syntax of `amsthm` theorems, except it has an optional argument for possible additional options to the default styles (`theorem` or `definition`).

`\__gzt_bilingual`

```
4389 \cs_new_protected:Nn \__gzt_bilingual:nmn
4390 {
4391   \deftranslation[to=French]{#1}{#2}
4392   \deftranslation[to=English]{#1}{#3}
4393 }
```

(End definition for `\_gzt_bilingual`.)

```
4394 \cs_new_protected:Nn \_gzt_new_theorem:nnnn
4395 {
4396   % \_gzt_bilingual:nnn {#2}{#3}{#4}
4397   \deftranslation[to=French]{#2}{#3}
4398   \deftranslation[to=English]{#2}{#4}
4399   \declaretheorem[
4400     #1,
4401     name=\translate{#2}
4402   ]{#2}
4403   \declaretheorem[
4404     #1,
4405     name=\translate{#2},
4406     numbered=no
4407   ]{#2*}
4408 }
4409 \cs_generate_variant:Nn \_gzt_new_theorem:nnnn { nnVV }
4410 \declaretheoremstyle[spaceabove=3pt,notefont=\bfseries,bodyfont=\itshape]{theorem}
4411 \declaretheoremstyle[spaceabove=3pt,notefont=\bfseries,bodyfont=\normalfont]{definition}
4412 \declaretheoremstyle[spaceabove=3pt,bodyfont=\normalfont,
4413   qed=\ensuremath{\qedsymbol},headfont=\normalfont\itshape,numbered=no]{proof}
```

Then, we define a public command, similar to `\newtheorem`, based on `\_@@_new_theorem`, that lets the user define his own theorems:

```
4414 \RenewDocumentCommand \newtheorem { 0{ } m }
4415 {
4416   \tl_clear:N \l__gzt_newtheorem_style_tl
4417   \tl_clear:N \l__gzt_newtheorem_frenchttitle_tl
4418   \tl_clear:N \l__gzt_newtheorem_englishttitle_tl
4419   \tl_set:Nn \l__gzt_newtheorem_englishttitle_tl {
4420     \text_titlecase:n {#2}
4421   }
4422   \tl_set:Nf \l__gzt_newtheorem_frenchttitle_tl {
4423     \l__gzt_newtheorem_englishttitle_tl
4424   }
4425   \tl_set:Nn \l__gzt_newtheorem_style_tl {
4426     theorem
```

```

4427 }
4428 \IfNoValueF {#1}
4429 {
4430   \keys_set:nn { gzt/newtheorem } { #1 }
4431 }
4432 % \tl_if_eq:VVF { \l__gzt_newtheorem_englishtitle_tl } { \MakeUppercase #2 }
4433 % {
4434 %   \tl_if_eq:NNF { \l__gzt_newtheorem_frenchttitle_tl } { \l__gzt_newtheorem_englishtitle_tl }
4435 %   {
4436 %     \tl_set:Nf \l__gzt_newtheorem_frenchttitle_tl {
4437 %       \l__gzt_newtheorem_englishtitle_tl
4438 %     }
4439 %   }
4440 % }
4441 \__gzt_new_theorem:nnVV
4442 {style=\l__gzt_newtheorem_style_tl}
4443 {#2}
4444 {\l__gzt_newtheorem_frenchttitle_tl}
4445 {\l__gzt_newtheorem_englishtitle_tl}
4446 }

```

Finally, we define some usual theorems:

```

4447 \newtheorem[frenchttitle=Th\`eor\`eme]{theorem}
4448 % \newtheorem[frenchttitle=Th\`eor\`eme,englishtitle=Theorem]{theoreme}
4449 \newtheorem[frenchttitle=Corollaire]{corollary}
4450 % \newtheorem[englishtitle=corollary]{corollaire}
4451 \newtheorem{conjecture}
4452 \newtheorem{proposition}
4453 \newtheorem[frenchttitle=Lemme]{lemma}
4454 % \newtheorem[englishtitle=Lemma]{lemme}
4455 \newtheorem[frenchttitle=Axiome]{axiom}
4456 % \newtheorem[englishtitle=Axiom]{axiome}
4457 %
4458 \newtheorem[style=definition,frenchttitle=D\`efinition]{definition}
4459 \newtheorem[style=definition,frenchttitle=Remarque]{remark}
4460 \newtheorem[style=definition,frenchttitle=Exemple]{example}
4461 \newtheorem[style=definition]{notation}

```

```

4462 %
4463 \let\proof\relax
4464 \newtheorem[style=proof,frenchtitle=Preuve]{proof}
4465 %
4466 \cs_new_protected:Nn \__gzt_clone_theorem:nn
4467 {
4468   \NewDocumentEnvironment{#1}{}
4469   {
4470     \begin{#2}
4471     }
4472     {
4473     \end{#2}
4474   }
4475   \NewDocumentEnvironment{#1*}{}
4476   {
4477     \begin{#2*}
4478     }
4479     {
4480     \end{#2*}
4481   }
4482 }
4483 \__gzt_clone_theorem:nn {theoreme} {theorem}
4484 \__gzt_clone_theorem:nn {corollaire} {corollary}
4485 \__gzt_clone_theorem:nn {lemme} {lemma}
4486 \__gzt_clone_theorem:nn {axiome} {axiom}
4487 \__gzt_clone_theorem:nn {remarque} {remark}
4488 \__gzt_clone_theorem:nn {exemple} {example}
4489 \__gzt_clone_theorem:nn {preuve} {proof}

```

### 2.36.3 (Reciprocal) Trigonometric and hyperbolic functions

Reciprocal trigonometric functions, even written with usual `\arccos`, `\arcsin`, `\arctan`, etc. are typeset with an uppercase “A”:

```

4490 \DeclareMathOperator{\cotan}{cotan}
4491 \DeclareMathOperator{\Arccos}{Arccos}
4492 \DeclareMathOperator{\Arcsin}{Arcsin}
4493 \DeclareMathOperator{\Arctan}{Arctan}
4494 \DeclareMathOperator{\Argch}{Argch}

```



```

4495 \DeclareMathOperator{\Argsh}{Argsh}
4496 \DeclareMathOperator{\Argth}{Argth}
4497 \cs_set_eq:NN \__gzt_orig_arccos \arccos
4498 \cs_set_eq:NN \__gzt_orig_arcsin \arcsin
4499 \cs_set_eq:NN \__gzt_orig_arctan \arctan
4500 \RenewDocumentCommand \arccos {} {
4501   \IfLanguageName {french}{\Arccos}{\__gzt_orig_arccos}
4502 }
4503 \RenewDocumentCommand \arcsin {} {
4504   \IfLanguageName {french}{\Arcsin}{\__gzt_orig_arcsin}
4505 }
4506 \RenewDocumentCommand \arctan {} {
4507   \IfLanguageName {french}{\Arctan}{\__gzt_orig_arctan}
4508 }
4509 \DeclareMathOperator{\ch}{ch}
4510 \DeclareMathOperator{\sh}{sh}
4511 \cs_set_eq:NN \__gzt_orig_tanh \tanh
4512 \RenewDocumentCommand \tanh {} {
4513   \IfLanguageName {french}{\operatorname{th}}{\__gzt_orig_tanh}
4514 }
4515 \cs_set_eq:NN \__gzt_orig_log \log
4516 \cs_set_eq:NN \__gzt_orig_lg \lg
4517 \RenewDocumentCommand \log { s } {
4518   \IfBooleanTF {#1}
4519   {
4520     \__gzt_orig_log
4521   }
4522   {
4523     \ln
4524   }
4525 }
4526 \RenewDocumentCommand \lg { s } {
4527   \IfBooleanTF {#1}
4528   {
4529     \__gzt_orig_lg
4530   }
4531   {
4532     \ln

```

```

4533 }
4534 }
4535 \cs_set_eq:NN \__gzt_orig_leq \leq
4536 \cs_set_eq:NN \__gzt_orig_geq \geq
4537 \RenewDocumentCommand \le {} {
4538   \IfLanguageName {french}{\leqslant}{\__gzt_orig_leq}
4539 }
4540 \RenewDocumentCommand \leq {} {
4541   \IfLanguageName {french}{\leqslant}{\__gzt_orig_leq}
4542 }
4543 \RenewDocumentCommand \ge {} {
4544   \IfLanguageName {french}{\geqslant}{\__gzt_orig_geq}
4545 }
4546 \RenewDocumentCommand \geq {} {
4547   \IfLanguageName {french}{\geqslant}{\__gzt_orig_geq}
4548 }
4549 \NewDocumentCommand \N {} {\mathbb{N}}
4550 \NewDocumentCommand \Z {} {\mathbb{Z}}
4551 \NewDocumentCommand \D {} {\mathbb{D}}
4552 \NewDocumentCommand \Q {} {\mathbb{Q}}
4553 \NewDocumentCommand \R {} {\mathbb{R}}
4554 \NewDocumentCommand \C {} {\mathbb{C}}
4555 \NewDocumentCommand \K {} {\mathbb{K}}

```

We define a token list variable that contains the color of the description labels because it won't be constant but will be:

- black in the front matter and in the books rubric

We now leave the  $\text{\LaTeX}$  programming environment.

```

4556 % \ExplSyntaxOff
4557 </class | class-article>

```

## 2.37 Initial configuration file

Before the code of the `gzt` class by itself, we give the initial configuration file.

```

4558 <*configuration>

```

```

4559 %%%%%%%%%%%
4560 %% Journal data
4561 %%%%%%%%%%%
4562 \journalsetup{
4563   publisher = \smf,
4564   address = Institut Henri Poincar'\e\newline
4565             11 rue Pierre et Marie Curie\newline
4566             75231 Paris cedex 05,
4567   phone = 01 44 27 67 96,
4568   fax = 01 40 46 90 96,
4569   email = gazette@dma.ens.fr,
4570   url = https://smf.emath.fr,
4571   issn = 0224-8999
4572 }
4573 %%%%%%%%%%%
4574 %% SMF President
4575 %%%%%%%%%%%
4576 \president{Seuret, Stéphane}{-}{}
4577 %%%%%%%%%%%
4578 %% Editor in chief
4579 %%%%%%%%%%%
4580 \editorinchief{Adamczewski, Boris}{Institut de Mathématiques de Marseille}{boris.adamczewski@math.cnrs.fr}
4581 %%%%%%%%%%%
4582 %% Editors
4583 %%%%%%%%%%%
4584 \editor{Colin, Vincent}{Université de Nantes}{vincent.colin@math.univ-nantes.fr}
4585 \editor{Ehrhardt, Caroline}{Université Vincennes Saint-Denis}{caroline.ehrhardt@inrp.fr}
4586 \editor{Gayet, Damien}{Institut Fourier, Grenoble}{damien.gayet@ujf-grenoble.fr}
4587 \editor{Gouëzel, Sébastien}{Université Rennes 1}{sebastien.gouezel@univ-rennes1.fr}
4588 \editor{Helffer, Bernard}{Université Paris-Sud}{bernard.helffer@math.u-psud.fr}
4589 \editor{Loidreau, Pierre}{Université Rennes 1}{pierre.loidreau@univ-rennes1.fr}
4590 \editor{Planchon, Fabrice}{Université de Nice}{fab@unice.fr}
4591 \editor{Queffélec, Martine}{Université Lille 1}{Martine.Queffelec@univ-lille1.fr}
4592 \editor{Seuret, Stéphane}{Université Paris Est Créteil}{seuret@u-pec.fr}
4593 %%%%%%%%%%%
4594 %% Graphic designer
4595 %%%%%%%%%%%
4596 \graphicdesigner{Lozanne, Nathalie}{-}{n.lozanne@free.fr}

```

```

4597 %%%%%%%%%%%
4598 %% Secretary
4599 %%%%%%%%%%%
4600 \secretary{Ropartz, Claire}{-}{-}
4601 %%%%%%%%%%%
4602 %% LaTeX class designer (and maintainer(s))
4603 %%%%%%%%%%%
4604 \classdesigner{Bitouzé, Denis}{Université du Littoral Côte d'Opale}{denis.bitouze@univ-littoral.fr}
4605 %%%%%%%%%%%
4606 %% Font designer text
4607 %%%%%%%%%%%
4608 \fontdesignertext{%
4609     Nous utilisons la police \href{https://ctan.org/pkg/kpfonts}{Kp-Fonts} créée
4610     par Christophe \textsc{Caignaert}%.%
4611 }
4612 %%%%%%%%%%%
4613 %% Printer text
4614 %%%%%%%%%%%
4615 \printertext{Jouve \aside*{1 rue du docteur Sauvé 53100 Mayenne}}
4616 %%%%%%%%%%%
4617 %% Authors instructions
4618 %%%%%%%%%%%
4619 \begin{authorsinstructions}
4620     \begin{description}
4621     \item[Objectifs de la \gzt*{}.] Bulletin interne de la \smf{}, la \gzt{} est
4622         un support privilégié d'expression au sein de la communauté
4623         mathématique. À ce titre, elle informe de l'actualité des mathématiques, de
4624         leur enseignement, de leur histoire, de leur relations avec d'autres
4625         sciences (physique, informatique, biologie, etc.).
4626
4627         On y trouve donc des articles scientifiques de présentation, ainsi que des
4628         révisions de parutions mathématiques récentes. Elle contient aussi des
4629         informations sur tout ce qui concerne la vie professionnelle d'un
4630         mathématicien (recrutements, conditions de travail, publications
4631         scientifiques, etc.) et aussi des témoignages ou des tribunes libres.
4632
4633         La \gzt{} paraît à raison de quatre numéros par an avec, optionnellement, un
4634         numéro spécial consacré à un sujet particulier de mathématiques ou bien à un

```

4635 grand mathématicien.

4636

4637 Elle est envoyée gratuitement à chaque adhérent. Les numéros actuel et

4638 anciens sont disponibles en ligne

4639 ([\url{https://smf4.emath.fr/Publications/Gazette/}](https://smf4.emath.fr/Publications/Gazette/)).

4640

4641 \item[Soumission d'article.] Les articles doivent être envoyés au secrétariat,

4642 de préférence par courrier électronique ([\email{gazette@dma.ens.fr}](mailto:gazette@dma.ens.fr)), pour

4643 être examinés par le comité de rédaction. Si un article est accepté, son

4644 fichier source doit alors être fourni, de préférence sous forme d'un fichier

4645 `\TeX{}` ou, à l'extrême rigueur, LibreOffice, OpenOffice ou

4646 `Word\textregistered{}` ; une saisie de manuscrits est cependant possible pour

4647 des textes courts.

4648

4649 Les fichiers `\TeX{}` doivent :

4650 `\begin{itemize}`

4651 `\item` de préférence recourir au format `\LaTeXe{}` : éviter les commandes des

4652 autres formats (tels que plain `\TeX{}`) ;

4653 `\item` être si possible `\enquote{encodés}` en `\texttt{UTF-8}` ;

4654 `\item` être le plus `\enquote{pur}` possible : éviter les macros

4655 `\enquote{exotiques}` ainsi que les insertions manuelles d'espacements

4656 horizontaux ou verticaux (`\gztverb{\hspace}`, `\gztverb{\hskip}`,

4657 `\gztverb{\vspace}`, `\gztverb{\vskip}`, `\gztverb{\enlargethispage}`, etc.).

4658 `\end{itemize}`

4659 Les illustrations qui ne sont pas directement codées en `\TeX{}` doivent être

4660 fournies aux formats `\texttt{.pdf}` (à privilégier) ou, avec un bonne

4661 définition (`300-\textsc{dpi}` minimum), `\texttt{.png}` ou `\texttt{.jpg}`. Le

4662 format `\texttt{.eps}`, quoique indirectement supporté, est déconseillé.

4663

4664 Pour faciliter la composition de textes destinés à la `\gzt{}`, la `\smf{}`

4665 propose la classe `\LaTeX{}` `\gztarticlecl{}` fournie par les distributions

4666 `\TeX{}` courantes (`\TeX{}` Live et Mac`\TeX{}` `\aside{à partir de leur version`

4667 `2015}` ainsi que MiK`\TeX{}`), et sinon téléchargeable depuis la page

4668 [\url{https://ctan.org/pkg/gzt}](https://ctan.org/pkg/gzt). Sa documentation détaillée se trouve à la

4669 page [\url{https://mirrors.ctan.org/macros/latex/contrib/gzt/doc/gzt-fr.pdf}](https://mirrors.ctan.org/macros/latex/contrib/gzt/doc/gzt-fr.pdf).

4670 On prendra garde au fait que l'usage de cette classe nécessite une

4671 distribution `\TeX{}` à jour.

4672

```

4673 Pour plus de détails, consulter la page
4674 \url{https://smf.emath.fr/les-publications/la-gazette}.
4675 %
4676 % \item[Rubrique \enquote{Mathématiques}] La \gzt{} publie des articles de
4677 % mathématiques et d'interactions ou applications des mathématiques,
4678 % chargés
4679 % de présenter un résultat, exposer une notion ou de commenter une
4680 % actualité.
4681 %
4682 % Ils s'adressent à un public étendu. Les textes privilégiés sont courts,
4683 % pédagogiques et illustrés par des exemples.
4684 %
4685 % La bibliographie ne vise pas à l'exhaustivité et se concentre sur les
4686 % textes
4687 % introductifs et de référence.
4688 %
4689 % Les articles d'histoire des mathématiques ou contenant des vues
4690 % historiques
4691 % ou épistémologiques sont également bienvenus et doivent être conçus dans
4692 % le
4693 % même esprit.
4694 %
4695 % \item[Rubrique \enquote{Livres}] La rubrique \enquote{Livres} publie des
4696 % recensions s'attachant à présenter des ouvrages de mathématiques et des
4697 % ouvrages sur les mathématiques (leur histoire, leur philosophie, et plus
4698 % généralement tout ce qui a trait aux mathématiques et aux
4699 % mathématiciens).
4700 %
4701 % Quelques recommandations :
4702 % \begin{itemize}
4703 % \item Commencez la recension en donnant quelques informations sur le
4704 % livre
4705 % (titre, nom l'auteur, collection à laquelle il appartient, nom de
4706 % l'éditeur, ville de la maison d'édition, année de la publication,
4707 % nombre
4708 % de pages, \textsc{isbn} et prix en euros ou en dollars).
4709 % \item Précisez à quel public (de quel niveau) s'adresse le livre.
4710 % \item Vous êtes libre de dire ce que vous pensez (dans les limites de la

```

```

4711 % politesse et de la correction). Le comité de rédaction se réserve la
4712 % décision finale de publication après relecture de votre recension.
4713 % \item Les recensions doivent être brèves (une ou deux pages, trois au
4714 % maximum) et synthétiser l'apport original d'un ouvrage. Dans le cas
4715 % des
4716 % ouvrages de mathématiques, elles n'ont pas pour objectif de rendre
4717 % compte
4718 % d'une théorie et d'en donner un exposé ; la recension proprement dite
4719 % peut
4720 % toutefois être précédée, à titre d'introduction à l'analyse de
4721 % l'ouvrage,
4722 % d'un bref exposé panoramique et historique des idées générales du
4723 % domaine.
4724 % \item N'insérez pas de bibliographie.
4725 % \item Signez de vos nom et prénom et indiquez les noms de
4726 % l'établissement et
4727 % de la ville où vous exercez.
4728 % \end{itemize}
4729 \end{description}
4730 \end{authorsinstructions}
4731 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
4732 %% Font designer
4733 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
4734 \fontdesigner{Caignaert, Christophe}{}{}
4735 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
4736 %% Réglages divers
4737 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
4738 \pgfplotsset{compat=1.12}

4739 </configuration>

```

We now give the rest of the code of the source file of the Gazette's logo.

```

4740 <*class-logo>

4741 \ExplSyntaxOff
4742 \begin{document}
4743 \frontmatterheadtext
4744 \end{document}

```

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