The sblarticle Class

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Abstract

sblarticle provides a LaTeX class for producing articles and papers conforming to the style required by the Society of Biblical Literature. It depends on sblfonts for language support and biblatex-sbl for referencing.

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1 Introduction

The sblarticle class creates a term paper matching the style specified in the *Student Supplement for* The SBL Handbook of Style*, Second Edition.* See https://www.sbl-site.org/wp-content/uploads/2025/04/SBLHSsupp2015-02.pdf.

The class works with both `pdflatex` and the Unicode engines, but in order to make use of the SBL fonts you need to install them and use a Unicode engine (`lualatex` is recommended, especially for Hebrew).

This class is not intended to be a general flexible starting point for the requirements of all theological colleges and seminaries. In such cases you are better off beginning with the article class and loading biblatex-sbl and (possibly) sblfonts directly. You could use the code in this class as a guide.

1.1 Usage

Load the class using `\documentclass{sblarticle}`. See `sbltex-termpaper.pdf` in the documentation directory for an extended usage example.

The following standard commands and environments have been customised for this class:

- `\author`, `\title`, `\maketitle`
- `\tableofcontents`, `\listoffigure`, `\listoftables`
- `\section`, `\subsection`, `\subsubsection`, `\paragraph`, `\subparagraph`
- `\appendix`
- `\footnote`
- `\caption`
- `\printbibliography`, `\printbiblist{abbreviations}`
- `abstract`, `quotation`, `quote`

American, Greek and Hebrew are set up using sblfonts (and babel). A different main language can be chosen by passing the babel language name to the class.

1.2 Acknowledgements

The sblarticle class depends on a number of other packages:

- sblfonts (with fontspec, fontenc and babel), biblatex-sbl (with biblatex)
- csquotes, geometry, setspace, ragged2e, fancyhdr
- When `\DocumentMetadata` is not in use: caption, footmisc, titlesec, titletoc

1.3 Bug Reports and Feature Requests

Bug reports and feature requests can be made at the sbltex GitHub repository. See https://github.com/dcpurton/sbltex.

Note: This class is compatible with the LaTeX tagging project at release time. Although, regular updates will continue to be needed as the tagging project evolves and improves. The demonstration thesis, `sbltex-termpaper.pdf` in the documentation is built with tagging enabled and successfully verifies with VeraPDF.

2 Package Commands

`\course` `\course {⟨Course name⟩}`

Set the name of the course the paper is for. This is included on the title page.

`\institution` `\institution {⟨Institution name⟩}`

Set the name of the institution the paper will be submitted at. This is included on the title page.

`\professor` `\professor {⟨Professor name⟩}`

Set the name of the professor the paper will be submitted to. This is included on the title page.

3 Package Options

Items passed to the options below are *appended* to the default options rather than replacing them.

Any unrecognised options passed to the sblarticle class are passed through to the article class.

`biblatex` `biblatex = {⟨arguments⟩}` `Default: {style=sbl, language=auto, autolang=hyphen}`

These options are passed to the biblatex package.

See the biblatex-sbl package documentation for a full description of supported options and usage.

`sblfonts` `sblfonts = {⟨arguments⟩}`

Options to pass to the sblfonts package.

The defaults depend on whether the engine in use is 8bit or Unicode:

8bit defaults:

```
{
  mainfont=tempora,
  grfont=Alegreya-LF,
  hefont=frank
}
```

Unicode defaults:

```
{
  mainfont=TeXGyreTermesX,
  mainfontoptions={Extension=.otf, UprightFont=*-Regular,
    ItalicFont=*-Italic, BoldFont=*-Bold,
    BoldItalicFont=*-BoldItalic},
  sblfonts=true
}
```

Note that you will need to download and install the SBL fonts yourself from https://www.sbl-site.org/resources/fonts/.

See the sblfonts package documentation for a full description of supported options and usage.

4 Implementation

```
⟨*class⟩
⟨@@=sblarticle⟩

\NeedsTeXFormat{LaTeX2e}
\ProvidesExplClass{sblarticle}{2026-11-04}{1.1a}
  {Society of Biblical Literature Article Class (DCP)}

\clist_new:N \l__sblarticle_options_to_article_class_clist

\keys_define:nn { sblarticle }
  {
    , biblatex .clist_set:N = \l__sblarticle_options_to_biblatex_clist
    , sblfonts .clist_set:N = \l__sblarticle_options_to_sblfonts_clist
    , unknown  .code:n = {
                           \clist_put_right:No
                             \l__sblarticle_options_to_article_class_clist
                             { \CurrentOption }
                         }
  }

\ProcessKeyOptions
```

Set default options.

```
\clist_put_left:Nn \l__sblarticle_options_to_article_class_clist
  {
    , 12pt
    , titlepage
  }

\clist_put_left:Nn \l__sblarticle_options_to_biblatex_clist
  {
    , style    = sbl
    , language = auto
    , autolang = hyphen
  }

\sys_if_engine_opentype:TF
  {
    \clist_put_left:Nn \l__sblarticle_options_to_sblfonts_clist
```

```
      {
        , mainfont        = TeXGyreTermesX
        , mainfontoptions = {
                              , Extension      = .otf
                              , UprightFont    = *-Regular
                              , ItalicFont     = *-Italic
                              , BoldFont       = *-Bold
                              , BoldItalicFont = *-BoldItalic
                            }
        , sblfonts        = true
      }
  }
  {
    \clist_put_left:Nn \l__sblarticle_options_to_sblfonts_clist
      {
        , mainfont = tempora
        , grfont   = Alegreya-LF
        , hefont   = frank
      }
  }
```

Load article class.

```
\exp_args:No \PassOptionsToClass
  { \l__sblarticle_options_to_article_class_clist }
  { article }
\LoadClass { article }
```

Font and language set up.

```
\exp_args:No \PassOptionsToPackage
  { \l__sblarticle_options_to_sblfonts_clist }
  { sblfonts }
\RequirePackage { sblfonts }
```

biblatex set up.

```
\exp_args:No \PassOptionsToPackage
  { \l__sblarticle_options_to_biblatex_clist }
  { biblatex }
\RequirePackage { biblatex }
\RequirePackage { csquotes }
```

4.1 Margins

```
\RequirePackage [ margin = 1in, headheight = 14.5pt ] { geometry }
```

4.2 Text layout

```
\RequirePackage { setspace }
\RequirePackage { ragged2e }
\doublespacing
\frenchspacing
\dim_set:Nn \RaggedRightParindent { 0.5in }
\dim_set:Nn \RaggedLeftParindent  { 0.5in }
\dim_set:Nn \JustifyingParindent  { 0.5in }
\RaggedRight
\sloppy
```

```
\raggedbottom
\sys_if_engine_luatex:F
  {
    \AddBabelHook [ hebrew ] { sblarticle } { afterextras }
      {
        \raggedleft
        \parindent 0.5in
      }
    \AddBabelHook { sblarticle } { afterextras } { \RaggedRight }
  }
```

4.3 Headers and footers

```
\RequirePackage { fancyhdr }
\pagestyle { fancy }
\fancyhf { }
\fancyhead [ R ] { \thepage }
\cs_set_nopar:Npn \headrulewidth { 0pt }
\cs_set_nopar:Npn \sectionmark #1
  {
    \markboth
      { \int_compare:nNnT
          { \c@secnumdepth } > { \c_zero_int }
          { \thesection \skip_horizontal:n { 1em } }
        #1
      }
      { }
  }
```

4.4 Footnotes

Different handling is required for footnotes when tagging code is loaded.

```
\IfDocumentMetadataTF
  {
    \hook_gput_code:nnn { fntext / para } { sblarticle }
      { \RaggedRight }
    \socket_new_plug:nnn { fntext / mark } { sblarticle }
      {
        \skip_horizontal:N \footnotemargin
        \@thefnmark . \enspace
      }
    \socket_assign_plug:nn { fntext / mark } { sblarticle }
    \socket_assign_plug:nn
      { build / column / outputbox }
      { floats-space-footnotes }
  }
  {
    \RequirePackage [ bottom, ragged ] { footmisc }
    \cs_set_protected:Npn \@makefntext #1
      {
        \dim_set_eq:NN \parindent \footnotemargin
        \@thefnmark . \enspace
        \footnotelayout #1
      }
}
```

```
\dim_set:Nn \footnotemargin { 0.5in }
\cs_set:Npn \footnoterule
  {
    \kern -3pt
    \hrule width 2in
    \kern 2.6pt
    \vskip -8pt
  }
\dim_set:Nn \footnotesep { 20pt }
```

4.5 Captions

```
\skip_set:Nn \abovecaptionskip { 6pt }
\skip_set:Nn \belowcaptionskip { 6pt }
\cs_set:Npn \thefigure
  {
    \arabic { figure }
  }
\cs_set:Npn \thetable
  {
    \arabic { table }
  }
\counterwithout { figure } { part }
\counterwithout { table } { part }

\IfDocumentMetadataTF
  {
    \NewSocketPlug { caption / label } { sblarticle }
     {
       \small
       #1:~
     }
    \AssignSocketPlug { caption / label } { sblarticle }
  }
  {
    \RequirePackage [ font = small , skip = 6pt ] { caption }
  }
```

4.6 Block quotes

```
\IfDocumentMetadataTF
  {
    \EditInstance { blockenv } { quotation }
      {
        , final-code = \singlespacing
                       \vspace* { -5pt }
                       \ignorespaces
      }
    \EditInstance { block } { quotation-1 }
      {
        , begin-extra-vspace = 0pt
        , begin-vspace       = 0pt
        , left-margin        = 0.5in
        , right-margin       = 0pt
        , para-indent        = 0.5in
```

```
      , para-vspace        = 0pt
    }
  \EditInstance { blockenv } { quote }
    {
      , final-code = \singlespacing
                     \vspace* { -5pt }
                     \ignorespaces
    }
  \EditInstance { block } { quote-1 }
    {
      , begin-extra-vspace = 0pt
      , begin-vspace       = 0pt
      , left-margin        = 0.5in
      , right-margin       = 0pt
      , para-indent        = 0pt
      , para-vspace        = 7pt
    }
}
{
  \renewenvironment { quotation }
    {
      \list { }
        {
          \dim_set:Nn \leftmargin { 0.5in }
          \dim_zero:N \rightmargin
          \dim_zero:N \topsep
          \dim_zero:N \partopsep
          \dim_zero:N \itemsep
          \dim_zero:N \parsep
          \dim_set:Nn \itemindent { 0.5in }
          \dim_set:Nn \listparindent { 0.5in }
        }
      \item \relax
      \singlespacing
      \vspace* { -5pt }
    }
    {
      \endlist
    }
  \renewenvironment { quote }
    {
      \list { }
        {
          \dim_set:Nn \leftmargin { 0.5in }
          \dim_zero:N \rightmargin
          \dim_zero:N \topsep
          \dim_zero:N \partopsep
          \dim_zero:N \itemsep
          \dim_set:Nn \parsep { 7pt }
          \dim_zero:N \itemindent
          \dim_zero:N \listparindent
        }
      \item \relax
      \singlespacing
```

```
        \vspace* { -5pt }
      }
      {
        \endlist
      }
  }
```

4.7 Title page

```
\tl_new:N \g__sblarticle_course_tl
\tl_new:N \g__sblarticle_institution_tl
\tl_new:N \g__sblarticle_professor_tl

\cs_new_protected:Npn \course #1
  {
    \tl_gset:Nn \g__sblarticle_course_tl { #1 }
  }

\cs_new_protected:Npn \institution #1
  {
    \tl_gset:Nn \g__sblarticle_institution_tl { #1 }
  }

\cs_new_protected:Npn \professor #1
  {
    \tl_gset:Nn \g__sblarticle_professor_tl { #1 }
  }

\author { [Your ~ Name] }
\title { Title ~ of ~ Paper }
\tl_gset:Nn \g__sblarticle_course_tl { [Course ~ Number ~ and ~ Title] }
\tl_gset:Nn \g__sblarticle_institution_tl { [Name ~ of ~ Institution] }
\tl_gset:Nn \g__sblarticle_professor_tl { [Name ~ of ~ Professor] }

\NewTaggingSocket{ sblarticle / flatblock / begin } { 1 }
\NewTaggingSocket{ sblarticle / flatblock / end } { 0 }
\NewTaggingSocketPlug { sblarticle / flatblock / begin } { default }
  {
    \tag_struct_begin:n
      {
        tag = #1
      }
    \tagpdfsetup { para / flattened = true }
  }
\NewTaggingSocketPlug { sblarticle / flatblock / end } { default }
  {
    \para_end:
    \tag_struct_end:
  }
\AssignTaggingSocketPlug { sblarticle / flatblock / begin } { default }
\AssignTaggingSocketPlug { sblarticle / flatblock / end } { default }

\cs_set_protected:Npn \maketitle
  {
    \newgeometry { top=2in, bottom=2in }
    \pagenumbering { roman }
    \thispagestyle { empty }
    \group_begin:
```

```
      \UseTaggingSocket { sblarticle / flatblock / begin }
        { \UseStructureName { title / block } }
      \singlespacing
      \centering
      \MakeUppercase { \g__sblarticle_institution_tl } \para_end:
      \vfill
      \doublespacing
      \IfDocumentMetadataTF
        {
          \UseTaggingSocket { title } { } { \MakeUppercase { \@title } }
        }
        {
          \MakeUppercase { \@title }
        }
      \para_end:
      \vfill
      \singlespacing
      \MakeUppercase
        { Submitted ~ to ~ \g__sblarticle_professor_tl } \para_end:
      \MakeUppercase { in ~ Partial ~ Fulfilment ~ of } \para_end:
      \MakeUppercase { \g__sblarticle_course_tl } \para_end:
      \vfill
      \MakeUppercase { By } \para_end:
      \MakeUppercase { \@author } \para_end:
      \MakeUppercase { \@date } \para_end:
      \UseTaggingSocket { sblarticle / flatblock / end }
    \group_end:
    \restoregeometry
  }
```

4.8 Abstract

__sblarticle_abstract_protected_end:n {⟨*abstract*⟩}

This function is used to inject `\__sblarticle_frontmatter_peek:`

```
\cs_set_eq:Nc \__sblarticle_orig_protected_end:n { end~ }

\cs_new_protected_nopar:Nn \__sblarticle_abstract_protected_end:n
  {
    \__sblarticle_orig_protected_end:n { #1 }
    \tl_if_eq:nnT { #1 } { abstract }
      {
        \cs_gset_eq:cN { end~ } \__sblarticle_orig_protected_end:n
        \peek_remove_spaces:n
          {
            \peek_analysis_map_inline:n
              {
                \exp_args:No \token_if_eq_meaning:NNF { ##1 } \para_end:
                  {
                    \peek_analysis_map_break:n
                      {
                        \exp_after:w
                        \__sblarticle_frontmatter_peek:
                        ##1
                      }
```

```
                  }
                ##1
              }
          }
      }
  }
```

(*End of definition for* `\__sblarticle_abstract_protected_end:n`.)

```
\renewenvironment { abstract }
  {
    \part* { \abstractname }
    \addcontentsline { toc } { part } { \abstractname }
    \cs_gset_eq:cN { end~ } \__sblarticle_abstract_protected_end:n
  }
  {
    \par
    \clearpage
    \pagestyle { fancy }
  }
```

4.9 Section titles

```
\int_set:Nn \c@secnumdepth { -2 }
\cs_set_nopar:Npn \thepart
  {
    \@arabic \c@part
  }
```

These two functions ensure consistent spacing after section headings whether body paragraph text follows or another section heading follows.

```
\cs_new_nopar:Nn \__sblarticle_before_head_correction:
  {
    \hook_gclear_next_code:n { para / before }
  }
\cs_new_nopar:Nn \__sblarticle_after_head_correction:
  {
    \vspace* { -5.5pt }
    \hook_gput_next_code:nn { para / before } { \vspace* { 5.5pt } }
  }
```

For documents using `\DocumentMetadata` use standard kernel commands to redefine section headings, otherwise use the titlesec package.

```
\IfDocumentMetadataTF
  {
    \EditInstance { heading } { part }
      {
        , after-penalty-vspace = 52.5pt
        , after-vspace         = 37pt
        , force-unnumbered     = true
        , heading-decls        = \singlespacing
                                 \normalfont \normalsize
                                 \centering
        , placement            = top
```

```
    , title-decls          =
    , title-format         = \MakeUppercase {#1}
  }
\EditInstance { heading } { section }
  {
    , before-vspace = 37pt
    , after-vspace  = 0pt
    , heading-decls = \singlespacing
                      \normalfont \normalsize \bfseries
                      \centering
  }
\EditInstance { heading } { subsection }
  {
    , before-vspace = 37pt
    , after-vspace  = 0pt
    , heading-decls = \singlespacing
                      \normalfont \normalsize
                      \centering
  }
\EditInstance { heading } { subsubsection }
  {
    , before-vspace = 37pt
    , after-vspace  = 0pt
    , heading-decls = \singlespacing
                      \normalfont \normalsize \bfseries \itshape
  }
\DeclareInstance { heading } { paragraph } { display }
  {
    , name               = paragraph
    , parent-name        = subsubsection
    , level              = 4
    , before-vspace      = 37pt
    , after-vspace       = 0pt
    , heading-decls      = \singlespacing
                           \normalfont \normalsize
    , mark-cmd           = \paragraphmark {#1}
    , headformat-instance = paragraph
  }
\DeclareInstanceCopy { headformat } { paragraph } { std }
\EditInstance { heading } { subparagraph }
  {
    , before-vspace = 37pt
    , heading-decls = \normalfont \normalsize \bfseries
  }
\EditInstance { headformat } { subparagraph }
  {
    , heading-indent = 0pt
  }
\hook_gput_code:nnn { cmd / section / before } { sblarticle }
  { \__sblarticle_before_head_correction: }
\hook_gput_code:nnn { cmd / subsection / before } { sblarticle }
  { \__sblarticle_before_head_correction: }
\hook_gput_code:nnn { cmd / subsubsection / before } { sblarticle }
  { \__sblarticle_before_head_correction: }
```

```
    \hook_gput_code:nnn { cmd / paragraph / before } { sblarticle }
      { \__sblarticle_before_head_correction: }
    \hook_gput_code:nnn { cmd / part / after } { sblarticle }
      { \__sblarticle_after_head_correction: }
    \hook_gput_code:nnn { cmd / section / after } { sblarticle }
      { \__sblarticle_after_head_correction: }
    \hook_gput_code:nnn { cmd / subsection / after } { sblarticle }
      { \__sblarticle_after_head_correction: }
    \hook_gput_code:nnn { cmd / subsubsection / after } { sblarticle }
      { \__sblarticle_after_head_correction: }
  }
  {
    \RequirePackage [ newparttoc ] { titlesec }
    \titleclass { \part } [ 0 ] { top }

    \titlespacing* { \part }          { 0pt } { 41pt } { 37pt }
    \titlespacing* { \section }       { 0pt } { 37pt } { 0pt }
    \titlespacing* { \subsection }    { 0pt } { 37pt } { 0pt }
    \titlespacing* { \subsubsection } { 0pt } { 37pt } { 0pt }
    \titlespacing* { \paragraph }     { 0pt } { 37pt } { 0pt }
    \titlespacing* { \subparagraph }  { 0pt } { 37pt } { 1em }

    \titleformat
      { \part }
      [ block ]
      {
        \cs_if_exist_use:N \phantomsection
        \normalfont \normalsize \singlespacing \filcenter
      }
      { }
      { 12pt }
      { \MakeUppercase }
      [ \__sblarticle_after_head_correction: ]
    \titleformat
      { \section }
      [ block ]
      {
        \__sblarticle_before_head_correction:
        \normalfont \normalsize \singlespacing \bfseries \filcenter
      }
      { \thesection }
      { 1em }
      { }
      [ \__sblarticle_after_head_correction: ]
    \titleformat
      { \subsection }
      [ block ]
      {
        \__sblarticle_before_head_correction:
        \normalfont \normalsize \singlespacing \filcenter
      }
      { \thesubsection }
      { 1em }
      { }
      [ \__sblarticle_after_head_correction: ]
```

```
    \titleformat
      { \subsubsection }
      [ block ]
      {
        \__sblarticle_before_head_correction:
        \normalfont \normalsize \singlespacing \bfseries \itshape \filright
      }
      { \thesubsubsection }
      { 1em }
      { }
      [ \__sblarticle_after_head_correction: ]
    \titleformat
      { \paragraph }
      [ block ]
      {
        \__sblarticle_before_head_correction:
        \normalfont \normalsize \singlespacing \filright
      }
      { \theparagraph }
      { 1em }
      { }
    \titleformat
      { \subparagraph }
      [ runin ]
      { \normalfont \normalsize \bfseries }
      { \thesubparagraph }
      { 1em }
      { }
  }
```

4.10 Table of contents and list of figures/tables

```
\int_set:Nn \c@tocdepth { 2 }

\IfDocumentMetadataT
  {
    \hook_gput_code:nnn { cmd / @starttoc / before } { sblarticle }
      {
        \hook_gput_next_code:nn { cmd / @input / before }
          { \singlespacing }
      }
  }

\cs_set_protected:Npn \tableofcontents
  {
    \part* { \contentsname }
    \@mkboth
      { \contentsname }
      { \contentsname }
    \@starttoc { toc }
    \clearpage
    \__sblarticle_frontmatter_peek:
  }

\cs_set_protected:Npn \listoffigures
  {
```

```
    \part* { \listfigurename }
    \addcontentsline { toc } { part } { \listfigurename }
    \@mkboth
      { \listfigurename }
      { \listfigurename }
    \@starttoc { lof }
    \clearpage
    \__sblarticle_frontmatter_peek:
  }
\cs_set_protected:Npn \listoftables
  {
    \part* { \listtablename }
    \addcontentsline { toc } { part } { \listtablename }
    \@mkboth
      { \listtablename }
      { \listtablename }
    \@starttoc { lot }
    \clearpage
    \__sblarticle_frontmatter_peek:
  }
```

For documents using `\DocumentMetadata` use standard kernel commands to redefine table of contents lines, otherwise use the titletoc package.

```
\IfDocumentMetadataTF
  {
    \text_declare_expand_equivalent:Nn \numberline
      {
        \exp_not:n { \numberline }
      }
    \hook_gput_code:nnn { cmd / @dottedtocline / before }
      { sblarticle }
      {
        \addvspace { 14.5pt }
      }
    \hook_gput_code_with_args:nnn { contentsline / text / after }
      { sblarticle }
      {
        \int_compare:nNnT {#1} > { -1 }
          {
            \cs_set_nopar:Npn \leaders ##1 ##2 { }
          }
      }
    \cs_set_nopar:cpn { contentsline@text@-1@format }
      { \MakeUppercase }
    \socket_new:nn { sblarticle / numberline } { 1 }
    \socket_new_plug:nnn { sblarticle / numberline }
      { default }
      {
        \hook_use:nnw { contentsline / number / before } { 1 } {#1}
        #1 \skip_horizontal:n { 1em }
        \hook_use:nnw { contentsline / number / after } { 1 } {#1}
      }
    \socket_new_plug:nnn { sblarticle / numberline }
      { part }
```

```
    {
      \hook_use:nnw { contentsline / number / before } { 1 } {#1}
      \int_compare:nNnT { \sblarticle@appendices } = { 1 }
        {
          \MakeUppercase { \appendixname }
          \int_compare:nNnT { \sblarticle@appendix@state } > { 1 }
            {
              \InstanceValue { headformat } { part } { separator-a }
              #1
            }
          : \enspace
        }
      \hook_use:nnw { contentsline / number / after } { 1 } {#1}
    }
  \socket_assign_plug:nn
    { sblarticle / numberline } { default }
  \cs_set_nopar:Npn \numberline #1
    {
      \socket_use:n { sblarticle / numberline } {#1}
    }
  \cs_set_nopar:Npn \l@part
    {
      \socket_assign_plug:nn { sblarticle / numberline } { part }
      \@dottedtocline { -1 } { 0em } { 0em }
    }
  \cs_set_nopar:Npn \l@section
    {
      \socket_assign_plug:nn { sblarticle / numberline } { default }
      \@dottedtocline { 1 } { 1em } { 0em }
    }
  \cs_set_nopar:Npn \l@subsection
    {
      \socket_assign_plug:nn { sblarticle / numberline } { default }
      \@dottedtocline { 2 } { 2em } { 0em }
    }
  \cs_set_nopar:Npn \l@subsubsection
    {
      \socket_assign_plug:nn { sblarticle / numberline } { default }
      \@dottedtocline { 3 } { 3em } { 0em }
    }
  \cs_set_nopar:Npn \l@paragraph
    {
      \socket_assign_plug:nn { sblarticle / numberline } { default }
      \@dottedtocline { 4 } { 4em } { 0em }
    }
  \cs_set_nopar:Npn \l@subparagraph
    {
      \socket_assign_plug:nn { sblarticle / numberline } { default }
      \@dottedtocline { 5 } { 5em } { 0em }
    }
  \cs_set_nopar:Npn \l@figure
    {
      \socket_assign_plug:nn { sblarticle / numberline } { default }
      \@dottedtocline { 1 } { 0em } { 0em }
```

```
    }
  \cs_set_eq:NN \l@table \@figure
}
{
  \RequirePackage { titletoc }
```

`\__sblarticle_hyperlink:nn` `{`⟨*link*⟩`}` `{`⟨*text*⟩`}`

A convenience version of `\hyperlink` that just uses ⟨*text*⟩ if hyperref isn't loaded.

```
\cs_new_protected:Nn \__sblarticle_hyperlink:nn
  {
    \cs_if_exist_use:NTF \hyperlink
      { { #1 } { #2 } }
      { #2 }
  }
```

(*End of definition for* `\__sblarticle_hyperlink:nn`.)

```
\titlecontents { figure }
  [ 2em ]
  { \singlespacing \filright }
  {
    \__sblarticle_hyperlink:nn
      { \Hy@tocdestname }
      { \makebox [ 2em ] [ l ] { \thecontentslabel . \enspace } }
  }
  { }
  { \hspace { 0.5em } \titlerule* [ 0.65pc ] { . } \contentspage }
\titlecontents { table }
  [ 2em ]
  { \singlespacing \filright }
  {
    \__sblarticle_hyperlink:nn
      { \Hy@tocdestname }
      { \makebox [ 2em ] [ l ] { \thecontentslabel . \enspace } }
  }
  { }
  { \hspace { 0.5em } \titlerule* [ 0.65pc ] { . } \contentspage }
\titlecontents { part }
  [ 0pt ]
  { \singlespacing \filright }
  { \MakeUppercase }
  { \MakeUppercase }
  { \hspace { 0.5em } \titlerule* [ 0.65pc ] { . } \contentspage }
\titlecontents { section }
  [ 1em ]
  { \singlespacing \filright }
  {
    \__sblarticle_hyperlink:nn
      { \Hy@tocdestname }
      { \thecontentslabel \hspace { 1em } }
  }
  { }
  { \hfill \contentspage }
\titlecontents { subsection }
```

```
      [ 2em ]
      { \singlespacing \filright }
      {
        \__sblarticle_hyperlink:nn
          { \Hy@tocdestname }
          { \thecontentslabel \hspace { 1em } }
      }
      { }
      { \hfill \contentspage }
    \titlecontents { subsubsection }
      [ 3em ]
      { \singlespacing \filright }
      {
        \__sblarticle_hyperlink:nn
          { \Hy@tocdestname }
          { \thecontentslabel \hspace { 1em } }
      }
      { }
      { \hfill \contentspage }
    \titlecontents { paragraph }
      [ 4em ]
      { \singlespacing \filright }
      {
        \__sblarticle_hyperlink:nn
          { \Hy@tocdestname }
          { \thecontentslabel \hspace { 1em } }
      }
      { }
      { \hfill \contentspage }
    \titlecontents { subparagraph }
      [ 5em ]
      { \singlespacing \filright }
      {
        \__sblarticle_hyperlink:nn
          { \Hy@tocdestname }
          { \thecontentslabel \hspace { 1em } }
      }
      { }
      { \hfill \contentspage }
  }
```

4.11 Appendices

Set up appendix headings and table of contents.

```
\cs_set_eq:NN \sblarticle@hyperlink \__sblarticle_hyperlink:nn
```

Create a state flag indicating if `\appendix` has been called. Within appendices, this flag is set to a value of 1. This is only used when `\DocumentMetadata` is in use.

```
\int_new:N \sblarticle@appendices
```

Create a state flag for number of appendices. A value of 0 indicates there are no appendices, 1 indicates one appendix and 2 indicates multiple appendices.

```
\int_new:N \sblarticle@appendix@state
```

```
\hook_gput_code:nnn { enddocument / afterlastpage } { sblarticle }
  {
    \protected@write \@auxout
      { }
      {
        \exp_not:N \global
        \exp_not:N \sblarticle@appendix@state
        \int_use:N \sblarticle@appendix@state
      }
  }
\cs_new_protected:Nn \__sblarticle_set_up_appendices:
  {
    \int_compare:nNnT { \c@secnumdepth } < { \c_zero_int }
      {
        \int_set:Nn \c@secnumdepth { 0 }
      }
    \int_compare:nNnT { \sblarticle@appendix@state } = { 1 }
      { \int_gzero:N \sblarticle@appendix@state }
    \cs_if_exist_use:NT \hypersetup
      {
        {
          target-prefix = { part } { \Hy@appendixstring }
        }
      }
    \cs_set_nopar:Npn \thepart { \arabic { part } }
    \cs_set_nopar:Npn \thesection { \arabic { section } }
    \int_zero:N \c@part
    \IfDocumentMetadataTF
      {
        \addtocontents { toc } { \sblarticle@appendices 1 }
        \cs_new:Nn \__sblarticle_appendix_number_format:
          {
            \int_compare:nNnT
              { \sblarticle@appendix@state } > { 1 }
              { \thepart }
          }
        \cs_new:Nn \__sblarticle_appendix_separator_a:
          {
            \int_compare:nNnT
              { \sblarticle@appendix@state } > { 1 }
              {
                \skip_horizontal:n { 0.5em }
              }
          }
        \EditInstance { heading } { part }
          {
            , after-penalty-vspace = 47.5pt
            , force-unnumbered     = false
            , number-format        = \__sblarticle_appendix_number_format:
            , text                 = \appendixname
            , text-format          = \MakeUppercase {##1}
            , title-format         = \MakeUppercase {##1}
          }
        \EditInstance { headformat } { part }
```

```
      {
        , separator-a = \__sblarticle_appendix_separator_a:
        , separator-b = \par \nobreak \vspace { 12pt }
      }
    \DeclareDocumentCommand \part { s = { shorttitle } o m }
      {
        \bool_if:nF {##1}
          {
            \int_compare:nNnT { \sblarticle@appendix@state } < { 2 }
              { \int_gincr:N \sblarticle@appendix@state }
          }
        \ParseLaTeXeHeading { part } {##1} {##2} {##3}
        \__sblarticle_after_head_correction:
      }
    \DeclareDocumentCommand \section { s = { shorttitle } o m }
      {
        \bool_if:nF {##1}
          {
            \int_compare:nNnT { \sblarticle@appendix@state } < { 2 }
              { \int_gincr:N \sblarticle@appendix@state }
          }
        \ParseLaTeXeHeading { part } {##1} {##2} {##3}
        \__sblarticle_after_head_correction:
      }
    \DeclareDocumentCommand \subsection { s = { shorttitle } o m }
      {
        \__sblarticle_before_head_correction:
        \ParseLaTeXeHeading { section } {##1} {##2} {##3}
        \__sblarticle_after_head_correction:
      }
    \DeclareDocumentCommand \subsubsection { s = { shorttitle } o m }
      {
        \__sblarticle_before_head_correction:
        \ParseLaTeXeHeading { subsection } {##1} {##2} {##3}
        \__sblarticle_after_head_correction:
      }
    \DeclareDocumentCommand \paragraph { s = { shorttitle } o m }
      {
        \__sblarticle_before_head_correction:
        \ParseLaTeXeHeading { subsubsection } {##1} {##2} {##3}
        \__sblarticle_after_head_correction:
      }
    \DeclareDocumentCommand \subparagraph { s = { shorttitle } o m }
      {
        \__sblarticle_before_head_correction:
        \ParseLaTeXeHeading { paragraph } {##1} {##2} {##3}
      }
  }
  {
    \titlespacing* { \part } { 0pt } { 35.7pt } { 37pt }
    \cs_set_eq:NN \subparagraph  \paragraph
    \cs_set_eq:NN \paragraph     \subsubsection
    \cs_set_eq:NN \subsubsection \subsection
    \cs_set_eq:NN \subsection    \section
```

```
        \cs_set_eq:NN \section       \part
        \titleformat
          { \part }
          [ display ]
          {
            \cs_if_exist_use:N \phantomsection
            \singlespacing \normalfont \normalsize \filcenter
          }
          {
            \int_compare:nNnT { \sblarticle@appendix@state } < { 2 }
              { \int_gincr:N \sblarticle@appendix@state }
            \MakeUppercase { \appendixname }
            \int_compare:nNnT { \sblarticle@appendix@state } > { 1 }
              { \space \thepart }
          }
          { 12pt }
          { \MakeUppercase }
          [ \__sblarticle_after_head_correction: ]
        \titlecontents { part }
          [ 0pt ]
          { \singlespacing \filright }
          {
            \sblarticle@hyperlink
              { \Hy@tocdestname }
              {
                \MakeUppercase { \appendixname }
                \ifnum \sblarticle@appendix@state > 1
                  \strut \space \thecontentslabel
                \fi
                : \enspace
              }
            \MakeUppercase
          }
          { \MakeUppercase }
          { \hspace { 0.5em } \titlerule* [ 0.65pc ] { . } \contentspage }
      }
  }
\hook_gput_code:nnn
  { cmd / appendix / after }
  { sblarticle }
  { \__sblarticle_set_up_appendices: }
```

4.12 Bibliography and list of abbreviations

```
\DefineBibliographyStrings { english }
  {
    shorthands = { List~of~Abbreviations }
  }
\cs_set_nopar:Npn \bibsetup { \singlespacing }
\dim_set:Nn \bibhang { 0.5in }
\dim_set:Nn \bibitemsep { 12pt }
\dim_set:Nn \biblabelsep { 0.5in }
\defbibheading { bibliography } [ \bibname ]
```

```
  {
    \part* {#1}
  }
\defbibheading { bibintoc } [ \bibname ]
  {
    \part* {#1}
    \addcontentsline { toc } { part } {#1}
  }
\defbibheading { biblist } [ \biblistname ]
  {
    \part* {#1}
  }
\defbibheading { biblistintoc } [ \biblistname ]
  {
    \part* {#1}
    \addcontentsline { toc } { part } {#1}
  }
```

Peeking ahead from the end of `\printbiblist` is slightly more complicated because we only want to do so when it's in the front matter and it's defined with `\newrobuscmd*` with optional arguments.

```
\cs_new_protected:Npn \sblarticle@printbiblist@frontmatter@peek
  {
    \__sblarticle_if_page_numbering:nT { roman }
      {
        \__sblarticle_frontmatter_peek:
      }
  }
```

4.13 Helper functions

```
\ExplSyntaxOff
\expandafter\apptocmd\csname\string\printbiblist\endcsname
  {\sblarticle@printbiblist@frontmatter@peek}
  {}
  {}
\ExplSyntaxOn
```

`\__sblarticle_if_page_numbering:nT` `{`⟨*numbering style*⟩`}` `{`⟨*code if true*⟩`}`

Test if the current page numbering style matches a particular style. (e.g., `arabic` or `roman`).

```
\prg_new_protected_conditional:Npnn \__sblarticle_if_page_numbering:n #1 { T }
  {
    \cs_set_nopar:Nn \__sblarticle_thepage_test:
      { \csname @ #1 \endcsname \c@page }
    \if_meaning:w \thepage \__sblarticle_thepage_test:
      \prg_return_true:
    \else:
      \prg_return_false:
    \fi:
  }
```

(*End of definition for* `\__sblarticle_if_page_numbering:nT`.)

__sblarticle_frontmatter_peek: Peek ahead and insert the title of the paper at the start of the main matter.

```
\cs_new_protected:Nn \__sblarticle_frontmatter_peek:
  {
    \peek_analysis_map_inline:n
      {
```

Test if the next token is a control sequence of not.

```
        \int_compare:nNnTF {##2} = { -1 }
          {
            \exp_args:No \token_if_eq_meaning:NNF {##1} \par
              {
                \bool_case:nTF
                  {
                    {
                      \exp_args:No \token_if_eq_meaning_p:NN
                        {##1} \begin
                    }
                      { }
                    {
                      \exp_args:No \token_if_eq_meaning_p:NN
                        {##1} \tableofcontents
                    }
                      { }
                    {
                      \exp_args:No \token_if_eq_meaning_p:NN
                        {##1} \listoffigures
                    }
                      { }
                    {
                      \exp_args:No \token_if_eq_meaning_p:NN
                        {##1} \listoftables
                    }
                      { }
                    {
                      \exp_args:No \token_if_eq_meaning_p:NN
                        {##1} \printbiblist
                    }
                      { }
                  }
                  { \peek_analysis_map_break:n {##1} }
                  {
```

Insert the paper title if some control sequence other than the above is found.

```
                    \peek_analysis_map_break:n
                      {
                        \part { \@title }
                        \pagenumbering { arabic }
                        ##1
                      }
                  }
              }
          }
          {
```

Ignore spaces and insert the paper title if a token other than a control sequence is found.

```
            \exp_args:No \token_if_space:NF {##1}
              {
                \peek_analysis_map_break:n
                  {
                    \part { \@title }
                    \pagenumbering { arabic }
                    ##1
                  }
              }
          }
      }
  }
```

(*End of definition for* `\__sblarticle_frontmatter_peek:`.)

Add the code to peek ahead after `maketitle` at the end of preamble because hyperref (if loaded) takes over things.

```
\hook_gput_code:nnn
  { begindocument / before }
  { sblarticle }
  {
    \g@addto@macro \maketitle { \__sblarticle_frontmatter_peek: }
  }
\endinput
```

⟨/class⟩