

Genealogical Profiles for L^AT_EX

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1 Preface

This package enables the presentation of individual *profiles*, which may be useful for genealogical or local history treatises.

Each profile is typeset using key/value-configurable environments, and a number of macros are provided to enable formatting, references, and floruit calculations.

Issues can be reported at

<https://github.com/mikkelee/latex-genprofile/issues>

Wolfgang Amadeus MOZART

WM1

★ January 27, 1756 in Getreidegasse 9, Salzburg, † December 5, 1791 in Vienna.

Had a complex relationship with his rival Antonio SALIERI^{AS1}_{p. 1}.

Antonio SALIERI

AS1

★ August 18, 1750 in Legnago, Republic of Venice, † May 7, 1825 in Vienna.

Was falsely accused of poisoning MOZART^{WM1}_{p. 1}.

2 Configuration

The package is configured in the following manner:

```
\usepackage{genealogy-profiles}
```

Loads the package and sets some sensible defaults as further described below.

```
\gprKeys{\langle general options \rangle}
```

Can be used to set options globally (in the preamble) or locally (in a group). See section 6.1.1 for possible keys/values.

3 Usage

```
\begin{gprProfile}[\langle profile options \rangle]{\langle name \rangle}[\langle life events \rangle]  
  \langle environment content \rangle  
\end{gprProfile}
```

Typesets its contents according to the configured layout (see section 4). For possible profile options, see section 6.1.2.

The name will be parsed according to the current **name part order**^{→P.6} (see section 5 for discussion) and styled according to **givenname style**^{→P.7} etc.

Each profile must have an ID, either supplied by the author via the **id**^{→P.9} profile option key or automatically generated via the general **auto id**^{→P.5} key.

The **life events**^{→P.9} will be parsed as a database by the genealogytree package.

```
\begin{gprProfile*}{\langle profile options \rangle}[\langle life events \rangle]  
  \langle environment content \rangle  
\end{gprProfile*}
```

The **gprProfile*** environment provides more control at the expense of convenience, by requiring the name part(s) be set explicitly as profile options. See **givenname**^{→P.9} etc.

```
\gprName{\langle name \rangle}  
\gprName*{\langle name \rangle}
```

Typesets a name, styled according to **givenname style**^{→P.7} etc.

The regular version adds the name to any indices, the starred version does not.

```
\gprRef[⟨id⟩]{⟨name⟩}
\gprRef*[⟨id⟩]{⟨name⟩}
```

Typesets a reference to a profile according to **reference style**^{→P.8}. The ID is optional, in case they are not known or available at the time of writing. However, if the name is unique to the document, the reference should automatically be recognized.

If it is not possible for the package to identify the intended reference, either via ID or unique name, warnings will be emitted in the log as well as in the document (the latter can be configured via **unknown reference style**^{→P.9}).

When using an ID, the name parameter can be left empty, or alternatively be used to override the displayed name, eg. to change case to genitive, etc.

The regular version adds the reference to configured indices, the starred version does not.

These commands require two runs to account for forward references.

4 Profile Layout

The typeset profiles are laid out according to the following structure.

1. The contents of **begin profile**^{→P.6}
2. If **auto header**^{→P.5} is **true**:
 - (a) The contents of **begin header**^{→P.6}
 - (b) The contents of **header format**^{→P.6}
 - (c) The contents of **end header**^{→P.6}
3. If **life events**^{→P.9} and/or **\gprYear**^{→P.5(s)} were used:
 - (a) The contents of **begin life events**^{→P.6}.
 - (b) The events formatted according to the database format configured via the genealogytree package. The provided default simply lists life events separated by commas.
 - (c) The contents of **end life events**^{→P.6}
4. The content provided to the environment by the author.
5. The contents of **end profile**^{→P.6}

5 Name Parsing

Names are parsed according to the configured **name part order**^{→P.6} (some pre-sets are provided via **name type**^{→P.6}), in a left-to-right evaluation.

In order for single name parts to include multiple separate tokens (eg. multiple given names), underscores can be used to combine them. For example,

`Wolfgang_Amadeus Mozart` will, with the default `given and surname` name type, be parsed as the given name(s) `Wolfgang Amadeus` and the surname `Mozart`.

If the `name part order`^{→P.6} has more parts than the supplied value, the right-most parts will be empty. If this is not desired, one may mark empty name parts with a single underscore; for example, using the `nordic historical` name type, `Jens _ Smed` will parse as the given name `Jens`, no patronymic, and the byname `Smed` (ie. blacksmith).

Inside a profile environment, a number of shortcuts are provided to access the available name parts, as well as the ID and a full name styled according to the name style keys.

6 Profile Macros

A number of extra macros are available inside profiles to allow accessing some key values, as well as gather years for floruit calculations.

```
\gprHeader{}
```

A header styled according to `header format`^{→P.6}.
If `auto header`^{→P.5} is `false`, one may wish to use `\gprHeader` to manually insert the header at the desired location (see section 7 for an example).

```
\gprID{}
```

```
\gprStyledName{}
```

```
\gprFullName{}
```

```
\gprGivenName{}
```

```
\gprPatronymic{}
```

```
\gprSurname{}
```

```
\gprByname{}
```

Typesets the ID and name parts according to configured styles.
The styled name is formatted according to the style keys, see `givenname style`^{→P.7} etc.

```
\gprYear{\langle year \rangle}
\gprYear*{\langle year \rangle}
```

All tagged years in a profile will be gathered and inserted as a **floruit** range under **life events**^{→P.9}, which will by default only be displayed if there is no defined lifespan (ie. birth or baptism *and* death or burial).

The starred version does not typeset anything, and can thus be used to add “hidden” years to the floruit event.

These commands require two runs.

```
\gprYears{\langle year range \rangle}
\gprYears*{\langle year range \rangle}
```

Adds two years to the **floruit** event, by splitting at one or more hyphens.

Values such as **1750--1755** or **1750--55** will both be parsed as the two years **1750** and **1755** and typeset as the expected 1750–1755 or 1750–55, respectively.

Like **\gprYear**, the starred version produces no output, and two runs are required.

6.1 Option Keys

6.1.1 General Options

These are used with the **\gprKeys**^{→P.2} command, either globally in the preamble or locally in a group.

```
auto header=\langle true/false \rangle (initially false)
```

Automatically inserts a header using **header format**^{→P.6} at the beginning of profiles. See section 4.

```
auto id=\langle true/false \rangle (initially true)
```

Automatically generates an ID for each profile if no **id**^{→P.9} is supplied. The format is the name part initials combined with a number to ensure uniqueness.

If no ID is set either automatically or manually, an error is emitted.

`auto id prefix=<...>` (initially not set)

Prefixes auto-generated IDs with a string, which may be useful for works containing multiple sections.

`begin profile=<...>` (initially not set)

`begin header=<...>` (initially not set)

`end header=<...>` (initially not set)

`begin life events=<...>` (initially not set)

`end life events=<...>` (initially not set)

`end profile=<...>` (initially not set)

These keys allow configuring arbitrary L^AT_EX code to be inserted before/during/after the typeset `gprProfile`^{→P.2} and `gprProfile*`^{→P.2} environments (see section 4).

`header format=<...>` (initially `{\gprStyledName{}\hfill\gprID{}}`)

Formats a profile header, which will be available as `\gprHeader`^{→P.4}. See `\gprID`^{→P.4} etc. for available macros.

`name type=<...>` (initially `given and surname`)

`name part order=<...>` (initially `{givenname, surname}`)

The `name part order` is used for splitting a `fullname`^{→P.9} to its constituent parts for formatting, index entries, and (if configured) IDs.

Using the `name type` key provides access to a number of preconfigured `name part orders`:

- `given and surname` will set the `name part order` key to `{givenname, surname}` (the default).
- `nordic historical` will set the `name part order` key to `{givenname, patronymic, byname}`, which was commonly used in Scandinavia and the rest of the nordic countries.

If no preset `name type` exists for the intended use case, the `name part order` can be set directly (suggestions are welcome).

<code>givenname style=<...></code>	(initially not set)
<code>patronymic style=<...></code>	(initially not set)
<code>surname style=<...></code>	(initially not set)
<code>byname style=<...></code>	(initially not set)

These keys set the styling for each name part, which will together be available as the `\gprStyledName`^{→P.4}.

<code>id index=<...></code>	(initially not set)
<code>fullname index=<...></code>	(initially not set)
<code>givenname index=<...></code>	(initially not set)
<code>patronymic index=<...></code>	(initially not set)
<code>surname index=<...></code>	(initially not set)
<code>byname index=<...></code>	(initially not set)

Setting these keys will cause `gprProfile`^{→P.2} and `\gprRef`^{→P.3} to emit index data to the named index. The index must be created with eg. `imakeidx` before using.

They can point to the same index (eg. one may wish to use the same index for patronymics, surnames, and/or bynames). In fact, that has been set for this document (see final page).

At the end of the document, `\printindex` can then be used for each index as normal.

<code>id in index entries=<true/false></code>	(initially not set)
---	---------------------

Causes index entries to include the IDs in parentheses.

<code>include unknown in index=<true/false></code>	(initially not set)
<code>include ambiguous in index=<true/false></code>	(initially not set)

Causes the indexes to include references to persons with unknown IDs or ambiguous names, which can be used for correcting drafts.

`layout preset=<...>` (initially not set)

Sets a preconfigured style. Currently, two options are available:

- `clear` will blank out all the layout keys.
- `tcolorbox` sets the following keys:

```
\gprKeys{
  begin profile =
    ↪ {\begin{tcolorbox}[title=\gprHeader]},
  end life events = {\tcblower},
  end profile = {\end{tcolorbox}}
}
```

The box can be further configured via `\tcbset` as per the `tcolorbox` documentation.

Suggestions for more presets are welcome.

`main index entry style=<...>` (initially not set)

Adds formatting to the main index entry page numbers (ie. the ones pointing to the profile), leaving the ones referenced with `\gprRef`^{P.3} untouched; for example `textbf` will bold the main entry.

`nest index entries=<true/false>` (initially not set)

Causes index entries to be nested under the various patronymics/-surnames/bynames.

`page reference style=<...>` (initially `p.\nobreakspace#1`)

Formats page references. The value is expanded with the argument `#1` being the page number.

`reference style=<...>` (see below)

Formats references. The value is expanded with the arguments `#1` being the name, `#2` being the ID, and `#3` being the page reference. The default is to present these as the name followed by combined super- and subscripts (see also section 7 for another style). The result is wrapped in a hyperref link to the referenced profile.

`unknown reference style=<...>` (see below)

Formats unknown references. The value is expanded with the arguments **#1** being the name supplied by `\gprRef→P.3` and **#2** being a short description of the reason. The default is to present the name as red text with the reason (unknown/ambiguous) following in parentheses.

6.1.2 Profile Options

These are used in the first argument of the `gprProfile→P.2` and `gprProfile*→P.2` environments.

`id=<...>` (initially not set)

Sets an ID for the profile. If none is specified and `auto id→P.5` is **true**, one will be generated from name initials combined with a number to ensure uniqueness. Not specifying an ID while `auto id→P.5` is **false** will cause an error. Likewise, if an already used ID is specified, an error will be emitted.

`fullname={<...>}` (initially not set)

Sets the full name of the person. If it is specified, the configured `name part order→P.6` will be used to set the individual name parts. If it is not specified, one will be generated by combining the given name parts according to the configured `name part order→P.6`, using the below keys. See section 5 for further details.

`givenname=<...>` (initially not set)

`patronymic=<...>` (initially not set)

`surname=<...>` (initially not set)

`byname=<...>` (initially not set)

Sets individual name parts.

`life events=<...>` (initially not set)

Populates a genealogytree database, which will be typeset according to the settings of that package; refer to its documentation for configuration. Simple display defaults have been provided. For convenience, this key can be set with the final optional argument of the `gprProfile→P.2` and `gprProfile*→P.2` environments.

`no index=<true/false>` (initially not set)

Skips adding index entries for this profile.

7 Examples

7.1 Using `tcolorbox` & `nordic historical`

A simple example to show name parsing and use of `\gprRef`^{→P.3} and `\gprYear`^{→P.5}.

```
\gprKeys{
  name type = nordic historical,
  patronymic style = \itshape,
  byname style = \scshape,
  layout preset = tcolorbox,
}

\begin{gprProfile}{Jens Hansen}[ birth = {1790}{Denmark} ]
  Wife: \gprRef{Anne_Marie Olsdatter}.

  Let's also tag some years:
  \gprYear{1830}, \gprYear{1835}, and \gprYear{1840}.
\end{gprProfile}

\begin{gprProfile}{Anne_Marie Olsdatter}[ birth = {1795}{Denmark} ]
  Husband: \gprRef{Jens Hansen}.
\end{gprProfile}

\begin{gprProfile}{Jens Hansen Smed}
  An unrelated person with a byname.
\end{gprProfile}
```

<i>Jens Hansen</i>	JH-1
★ 1790 in Denmark, ✱ 1830 to 1840.	
Wife: Anne Marie <i>Olsdatter</i> _{p. 11} ^{AO-1} .	
Let's also tag some years: 1830, 1835, and 1840.	
<i>Anne Marie Olsdatter</i>	AO-1
★ 1795 in Denmark.	
Husband: Jens <i>Hansen</i> _{p. 11} ^{JH-1} .	
<i>Jens Hansen SMED</i>	JHS1
An unrelated person with a byname.	

7.2 Using Custom Layout & given and surname

A simple example to show different layout and reference styles.

```
\newcommand\spacedrule{\vspace*{5pt}\hrule\vspace*{5pt}}
\gprKeys{
  name type = given and surname,
  surname style = \scshape,
  auto header,
  begin profile = \spacedrule,
  end life events = \spacedrule,
  end profile = {\spacedrule\vspace*{\baselineskip}},
  reference style = {\#1\footnote{\#2,~\#3}}
}

\begin{gprProfile}{George Washington}[
  birth = {1732-02-22}{Popes Creek,Virginia Colony},
  death = {1799-12-14}{Mount Vernon,Virginia,U.S.}
]
  Attended the first \gprRef[WM1]{_ Mozart} performance
  in America in \gprYear{1784}.
\end{gprProfile}
```

This sentence demonstrates that references work even outside profiles: \gprRef[GW1]{_ Washington} was the first president of the United States.

George WASHINGTON GW1
★ February 22, 1732 in Popes Creek, Virginia Colony, † December 14, 1799 in Mount Vernon, Virginia, U.S..

Attended the first MOZART^a performance in America in 1784.

This sentence demonstrates that references work even outside profiles: WASHINGTON^b was the first president of the United States.

^aWM1, p. 1

^bGW1, p. 12

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Profile Index

This index was created by setting the keys `patronymic index`, `surname index`, and `byname index` all to the same index.

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