# Genealogical Profiles for LATEX

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January 24, 2024

### 1 Preface

This package enables the presenstation 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 references and name formatting.

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 Salieria, 1.

#### Antonio Salieri

AS1

 $\bigstar$  August 18, 1750 in Legnago, Republic of Venice,  $\boldsymbol{\dagger}$  May 7, 1825 in Vienna.

Was falsely accused of poisoning Mozart $_{\rm p.\,1}^{\rm WM1}$ .

# 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.

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

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  $\mathtt{id}^{\to P.8}$  profile option key or automatically generated via the general auto  $\mathtt{id}^{\to P.5}$  key.

The life  $\mathtt{events}^{\to P.\, 9}$  will be parsed as a database by the genealogy tree package.

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

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.

```
\label{local_series} $$ \operatorname{\mathbb{A}} = {\langle name \rangle} $$ $$ \operatorname{\mathbb{A}} = {\langle name \rangle} $$
```

Typesets a name, styled according to givenname  $style^{\rightarrow P.7}$  etc. The regular version adds the name to any indices, the starred veresion does not.

```
\label{local_control_control} $$ \operatorname{prRef} \{\langle id \rangle\} \{\langle name \rangle\} $$
```

Typesets a reference to a profile.

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 the unknown reference style<sup>¬P.8</sup>).

When using an ID, the name parameter can be left empty, or alternately 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.

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

All tagged years in a profile will be gathered and inserted as a range into a **floruit** life event, 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 typesets as the expected 1750-1755 or 1750-55, respectively.

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

## 4 Profile Layout

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

- 1. The contents of begin  $profile^{\rightarrow P.6}$
- 2. If auto header  $^{\rightarrow P.5}$  is true:
  - (a) The contents of begin  $header^{\rightarrow P.6}$
  - (b) The contents of header format $^{-P.6}$
  - (c) The contents of end  $header^{\rightarrow P.6}$
- 3. If life events  $^{\rightarrow P.9}$  and/or \gprYear  $^{\rightarrow P.3}$ (s) were used:
  - (a) The contents of begin life events  $^{^{\rightarrow}\,P.\,6}.$
  - (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  ${}^{\rightarrow}P.6$
- 4. The content provided to the environment by the author.
- 5. The contents of end  $profile^{\rightarrow P.6}$

# 5 Name Parsing

Names are parsed according to the configured name part  $\operatorname{order}^{\to P.6}$  (some presets are provided with name  $\operatorname{type}^{\to P.6}$ ), 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, <code>Wolfgang\_Amadeus Mozart</code> will, with the default <code>given</code> and <code>surname</code> name type, be parsed as the given name(s) <code>Wolfgang Amadeus</code> and the surname <code>Mozart</code>.

If the name part order  $\rightarrow$  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.

#### \gprHeader{}

A header styled according to header format P.6.

If auto header 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  ${\tt style}^{\to P.7}$  etc.

#### 6.1 Option Keys

#### 6.1.1 General Options

These are used with the  $\green prescript{\mathsf{NgprKeys}}^{\to\, P.\, 2}$  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 $^{\rightarrow P.6}$  at the beginning of profiles. See section 4.

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

Generates an ID for each profile if no  $id^{\rightarrow P.8}$  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=\langle ... \rangle (initially not set)
```

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

```
\begin{array}{ll} \operatorname{begin} \ \operatorname{profile=}\langle \ldots \rangle & \text{ (initially not set)} \\ \operatorname{begin} \ \operatorname{header=}\langle \ldots \rangle & \text{ (initially not set)} \\ \operatorname{end} \ \operatorname{header=}\langle \ldots \rangle & \text{ (initially not set)} \\ \operatorname{begin} \ \operatorname{life} \ \operatorname{events=}\langle \ldots \rangle & \text{ (initially not set)} \\ \operatorname{end} \ \operatorname{life} \ \operatorname{events=}\langle \ldots \rangle & \text{ (initially not set)} \\ \operatorname{end} \ \operatorname{profile=}\langle \ldots \rangle & \text{ (initially not set)} \\ \end{array}
```

These keys allow configuring arbitrary LATeX code to be inserted before/during/after the typeset  $\mathtt{gprProfile}^{\to P.2}$  and  $\mathtt{gprProfile}^{\star P.2}$  environments (see section 4).

```
header format=\(\ldots\) (initially \qprStyledName\\hfill\qprID\})
```

For mats a profile header. See  ${\tt \backslash gprID^{\to P.5}}$  etc. for available macros.

```
name type=\langle ... \rangle (initially given and surname) name part order=\langle ... \rangle (initially {givenname, surname})
```

The name part order is used for splitting a fullname  $^{\rightarrow P.8}$  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}, 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).

```
\begin{array}{ll} \textbf{givenname style=}\langle ... \rangle & \text{(initially not set)} \\ \textbf{patronymic style=}\langle ... \rangle & \text{(initially not set)} \\ \textbf{surname style=}\langle ... \rangle & \text{(initially not set)} \\ \textbf{byname style=}\langle ... \rangle & \text{(initially not set)} \end{array}
```

These keys set the styling for each name part, which will be available as the  $\gray P.5$ .

```
\begin{array}{lll} \mbox{id index=}\langle ... \rangle & \mbox{(initially not set)} \\ \mbox{fullname index=}\langle ... \rangle & \mbox{(initially not set)} \\ \mbox{givenname index=}\langle ... \rangle & \mbox{(initially not set)} \\ \mbox{patronymic index=}\langle ... \rangle & \mbox{(initially not set)} \\ \mbox{surname index=}\langle ... \rangle & \mbox{(initially not set)} \\ \mbox{byname index=}\langle ... \rangle & \mbox{(initially not set)} \\ \end{array}
```

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

They can point to the same index (eg. one may wish to use one 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.

```
id in index entries=\langle true/false \rangle (initially not set)
```

Causes index entries to include the IDs in parentheses.

```
include unknown in index=\langle true/false \rangle (initially not set)
include ambiguous in index=\langle true/false \rangle (initially not set)
```

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

```
main index entry style=\langle ... \rangle (initially not set)
```

Adds formatting to the main index entry page numbers (ie. the ones pointing to the profile), leaving the ones reference with  $\gray P.3$  untouched; for example  $\gray text$  will bold the main entry.

```
nest index entries=\langle true/false \rangle (initially not set)
```

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

```
reference style=\langle ...\rangle (see below)
```

Formats references. The value is expanded with the arguments #1 being the name, #2 being the ID, and #2 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).

Formats unknown references. The value is expanded with the arguments #1 being the name supplied by  $\grRef^{\to P.3}$  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 with the  $gprProfile^{\rightarrow P.2}$  and  $gprProfile^{\rightarrow P.2}$  environments.

$$id=\langle ... \rangle$$
 (initially not set)

Sets an ID for the profile. If none is specified and auto  $id^{\rightarrow P.5}$  is **true**, one will be generated from name initials combined with a number to ensure uniqueness.

If an already used ID is specified, an error will be emitted. Likewise, not specifying an ID while auto  $id^{\rightarrow P.5}$  is false will cause an error.

$$fullname = \{\langle ... \rangle\}$$
 (initially not set)

Sets the full name of the person. If it is specified, the configured name part  $\operatorname{order}^{\to P.6}$  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  $\operatorname{order}^{\to P.6}$ , using the below keys. See section 5 for further details.

```
\begin{array}{ll} {\tt givenname=\langle ... \rangle} & \text{(initially not set)} \\ {\tt patronymic=\langle ... \rangle} & \text{(initially not set)} \\ {\tt surname=\langle ... \rangle} & \text{(initially not set)} \\ {\tt byname=\langle ... \rangle} & \text{(initially not set)} \end{array}
```

Sets individual name parts.

### life events= $\langle ... \rangle$ (initially not set)

Populates a genealogy tree database, which will be typeset according to the settings of that package; refer to its documenation for configuration. Simple display defaults have been provided. For convenience, this key can be set with the final optional argument of the  ${\tt gprProfile}^{\to P.2}$  and  ${\tt gprProfile}^{\star P.2}$  environments.

#### no index= $\langle true/false \rangle$ (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  $\gr{Ref}^{P.3}$  and  $\gr{Rer}^{P.3}$ .

```
\gprKeys{
  name type = nordic historical,
  patronymic style = \itshape,
  byname style = \scshape,
  begin profile = {\begin{tcolorbox}[title = \gprHeader]},
  end life events = \tcblower,
  end profile = \end{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} ]
  {\tt Husband: \ \ \ \ } In {\tt Husband: \ \ \ \ } .
\end{gprProfile}
\begin{gprProfile}{Jens Hansen Smed}
  An unrelated person with a byname.
\end{gprProfile}
                                                                   JH-1
   {\rm Jens}\ Hansen
   ★ 1790 in Denmark, ※ 1830 to 1840.
   Wife: Anne Marie Olsdatter_{p.~10}^{AO-1}.
   Let's also tag some years: 1830, 1835, and 1840.
   Anne Marie Olsdatter
   ★ 1795 in Denmark.
   Husband: Jens Hansen_{p.10}^{JH-1}.
   Jens Hansen Smed
   An unrelated person with a byname.
```

#### 7.2 Using hrule & 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,
  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 \S rYear{1784}.
\end{gprProfile}
George Washington
★ 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.
  ^a\mathrm{WM1},\;\mathrm{p.}1
```

# Index

auto header key, 5	\gprSurname, 5
auto id key, 5	\gprYear, 3
auto id prefix key, 6	\gprYears, 3
begin header key, 6	header format key, 6
begin life events key, 6	id key, 8
begin profile key, 6	id in index entries key, 7
byname key, 9	id index key, 7
byname index key, 7	include ambiguous in index key, 7
byname style key, 7	include unknown in index key, 7
Commands	Keys
\gprByname, 5	auto header, 5
$\gray \gray \gra$	auto id, 5
$\gruin \gruin $	auto id prefix, 6
$\gruen \gruen $	begin header, 6
\gprID, 5	begin life events, 6
\gprKeys, 2	begin profile, 6
\gprName, 2	byname, 9
\gprPatronymic, 5	byname index, 7
\gprRef, 3	byname style, 7
\gprStyledName, 5	end header, 6
\gprSurname, 5	end life events, 6
\gprYear, 3	end profile, 6
$\gray \gray \gra$	fullname, 8
\usepackage, 2	fullname index, 7
	givenname, 9
end header key, 6	givenname index, 7
end life events key, 6	givenname style, 7
end profile key, 6	header format, 6
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givenname key, 9	name part order, 6
givenname index key, 7	$\verb"name type", 6$
givenname style key, 7	nest index entries, 8
\gprByname, 5	no index, 9
\gprFullName, 5	patronymic, 9
\gprGivenName, 5	patronymic index, 7
\gprHeader, 5	patronymic style, 7
\gprID, 5	reference style, 8
\gprKeys, 2	surname, 9
\gprName, 2	surname index, 7
$\verb \gprPatronymic , 5 $	surname style, 7
gprProfile environment, 2	unknown reference style, 8
<pre>gprProfile* environment, 2</pre>	life events key, 9
\gprRef, 3	,
\gprStyledName, 5	main index entry style $\ker, 7$

```
name part order key, 6
                                             surname key, 9
name type key, 6
                                             surname index key, 7
{\tt nest\ index\ entries\ key},\, 8
                                             surname style key, 7
no index key, 9
nordic historical value, 4, 6
                                             unknown reference style key, 8
                                             \verb|\usepackage|, 2
patronymic key, 9
patronymic index key, 7
                                             Values
patronymic style key, 7
                                                  given and surname, 4, 6
                                                  nordic historical, 4, 6
reference style key, 8
```

# **Profile Index**

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

Hansen Smed, Jens, 10
Hansen, Jens, 10
Salieri, Antonio, 1
Smed, Jens Hansen, 10
Mozart, Wolfgang Amadeus, 1, 11
Olsdatter, Anne Marie, 10
Washington, George, 11