

# ***A Python tool for QGIS for gender recognition in street directories***

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## Framework

In the last years the attention for **gender equality** in all context has increased all over the world.

Nowadays the sensibility of Public Administrations towards the naming of streets, roads, squares and monuments after women has highlighted that, instead, **the toponymy has always been oriented to the choice of male figures.**

## Goal

The goal of the present work is to **automate the gender reconnaissance** starting from a list of names (street directory for example).

Many methods of association between name and gender have been proposed and are available on the web, but not all of them natively take into account the position of the element considered.

We considered several solutions, including SPARQL queries on DbPedia, but we choose to implement a simpler and more manageable solution based on the **use of Wikidata's API within a Python code embedded in QGIS.**

## Implementation

The method is based on **searching for gender information about a real human being in Wikidata** (NO *Pinocchio* and *Peter Pan*, YES *Michelangelo Buonarroti*) .

The implemented function, starting from the street name contained in a field of the input geographic layer, **extracts the gender value from Wikidata, if it exists**.

## Advantages

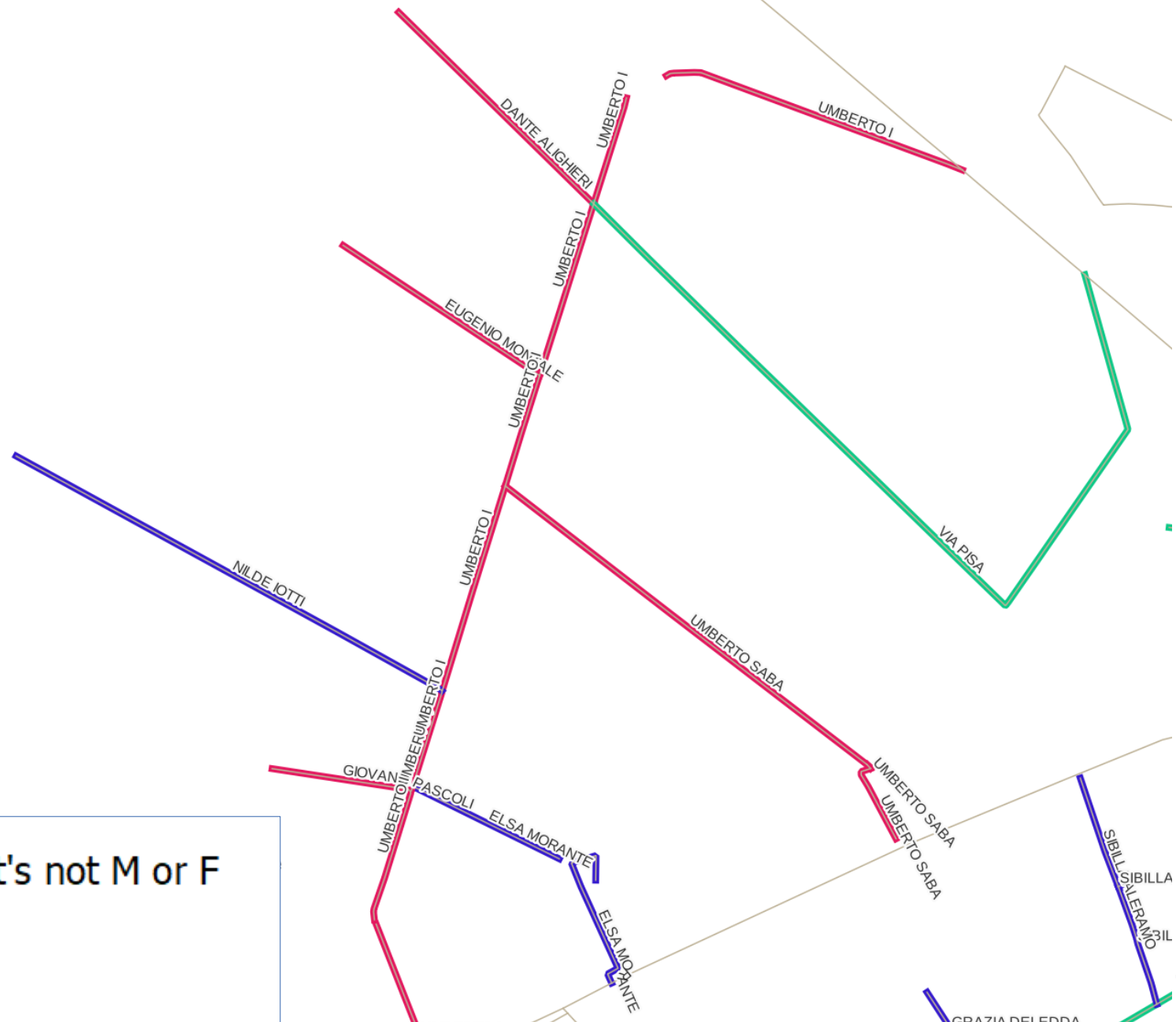
- 1) it is based on *universally recognised database* with a known and stable data structure;
- 2) it is *language-independent* because the ID of a Wikidata record is unique for all languages;
- 3) if the 'entry' for the person does not exist, it can be created directly in Wikipedia;
- 4) it is *integrated into QGIS as a function* that can also be used within algorithm streams;
- 5) it is *independent of the structure of the input dataset*

## Disadvantages

- 1) it *only works when connected to the web*;
- 2) *actually it does not handle multiple responses*.

gender	street name
	VIA TRINO
	STRADA COMUNALE DI LAMPORASSO
NULL	NULL
*	SAN FRANCESCO DA PAOLA
M	UMBERTO I
M	EUGENIO MONTALE
F	GRAZIA DELEDDA
M	UMBERTO SABA
*	VIA TORINO
F	ELSA MORANTE
F	SIBILLA ALERAMO
M	GIOVANNI PASCOLI
M	DANTE ALIGHIERI
*	VIA PISA
F	NILDE IOTTI

<https://github.com/skampus/toponomasticafemminile>



— \* --> it exists but it's not M or F

— F

— M