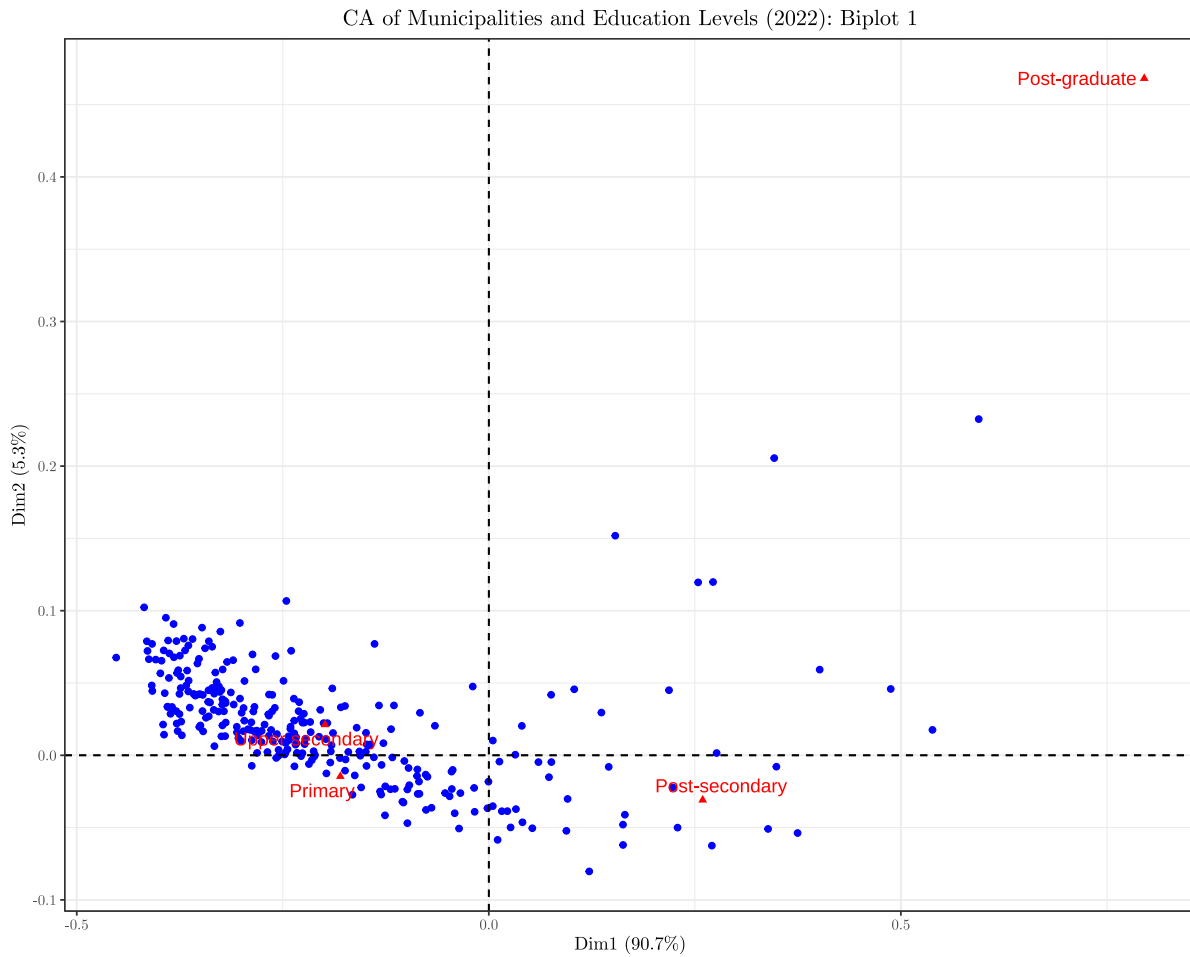


# CAs for the municipalities dataset

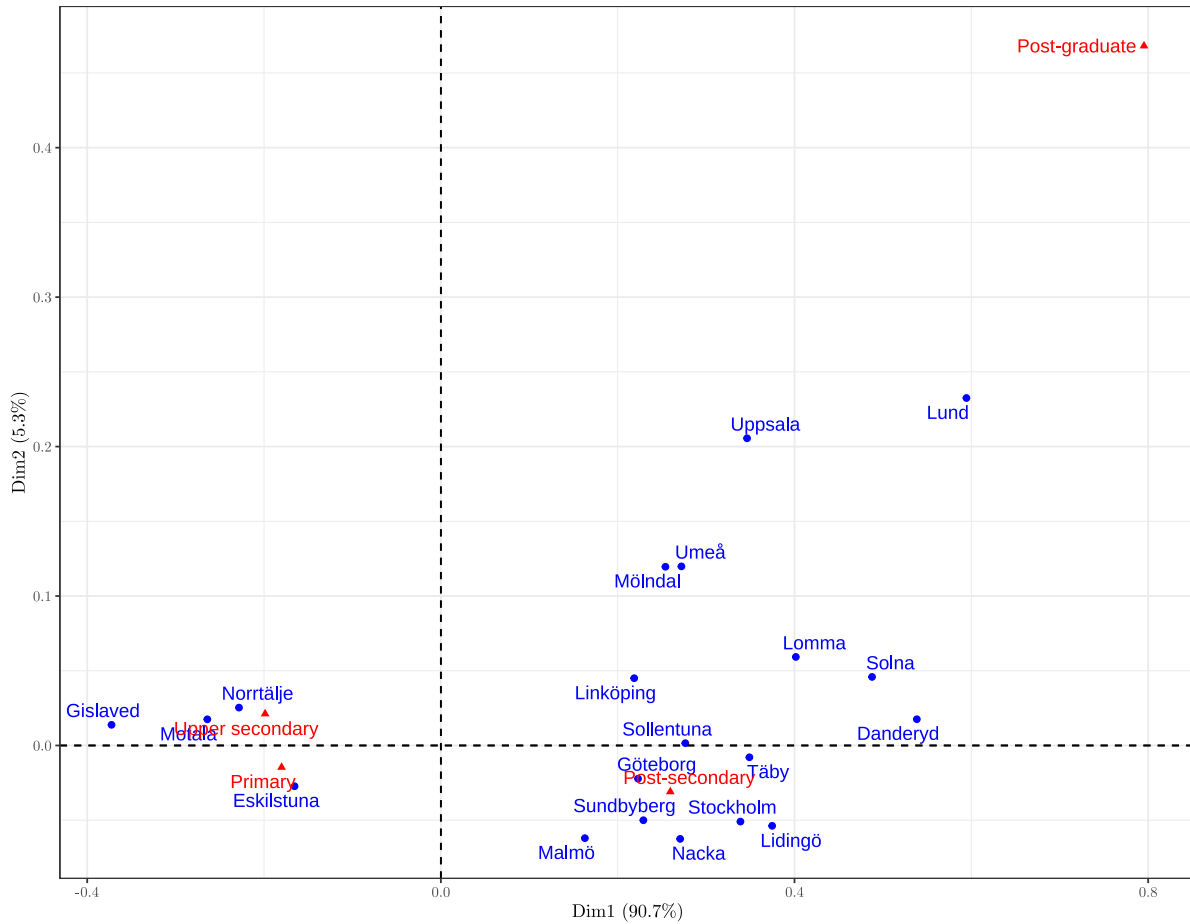
Clara Comte

## Municipalities and educational levels

Let's do a CA with municipalities and educational levels. In this case, I chose to display two biplots: one with every municipality, without labels for more visibility, and one with labels, but with only the 20 municipalities that contribute the most to the CA.



CA of Municipalities and Education Levels (2022): Biplot 1



The first axis explains 91 % of the total inertia, which makes it highly important in this CA. We can understand it as an educational gradient as it opposes primary and upper secondary levels on the left of the axis, and post-secondary and post-graduate levels to the right. Cities like Stockholm, Uppsala or Lund are highly educated while Eskilstuna or Gislaved are less educated.

The second axis, that explains 5 % of the inertia, seems highly structured by the post-graduate modalities. At the top of the biplot, we find cities such as Uppsala or Lund, known as Sweden's two major university cities, that stand out clearly from all other municipalities. While at the bottom, we find large cities like Stockholm or Malmö that have high post-secondary levels but relatively few post-graduates.

Overall, this graph suggests many things. First, the fact that the axis 1 explains 91 % of the variance shows how the educational gradient is the dominant structural feature of the data. Then, this graph suggests significant inequalities between a minority of highly educated municipalities (Lund, Uppsala, Solna...) and poorly educated cities (Gislaved, Eskilstuna, Norrtälje...).

**Municipalities and ? (CA n°2)**