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Are fertility levels really converging around the Mediterranean ?

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Exploring the link between education and fertility at subnational level

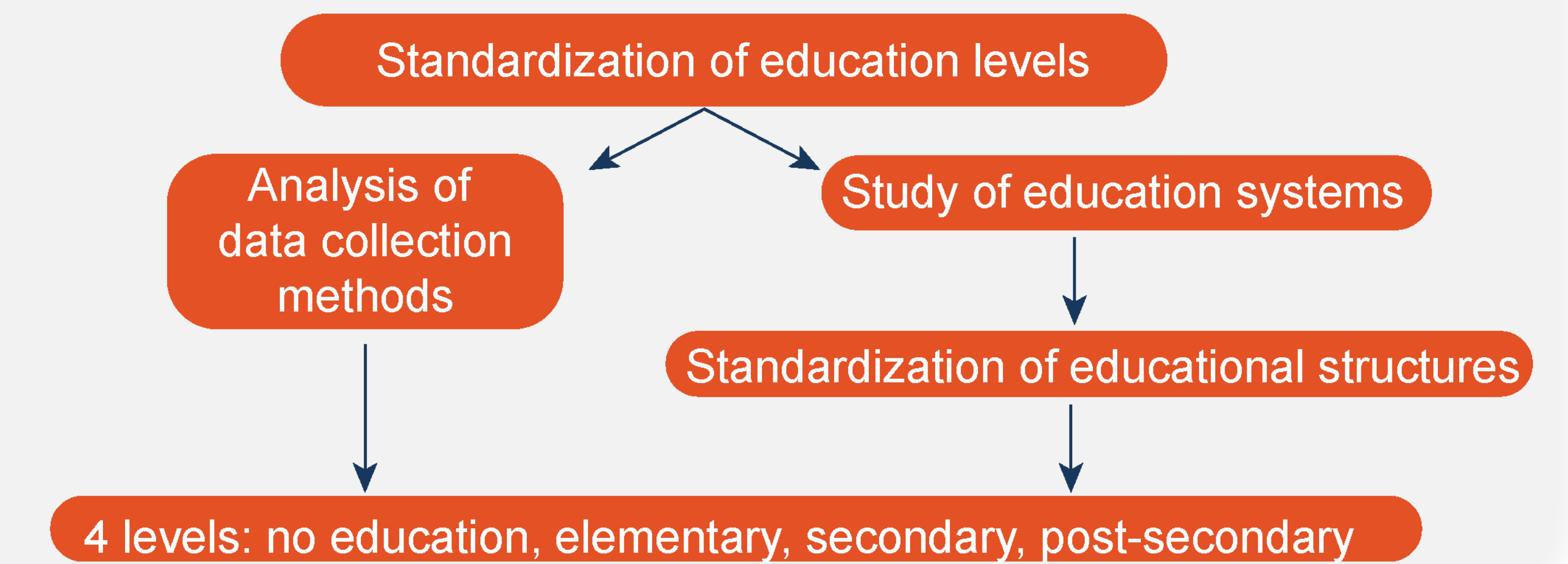
A large number of research studies point to education as a key factor in explaining changes in fertility patterns. The correlation between higher levels of education and lower fertility rates has been widely demonstrated. Philippe Fargues (2000) points out that the fertility differentials between given geographical territories are narrower among higher educated women and wider among uneducated women. Our research re-assesses differential fertility at a regional level, cross-referencing demographic data with geographic data within the Mediterranean area. Using the fertility diffusion theories, we consider that the use of birth control depends on education attainment.

Is there a cross-border negative correlation between fertility gap and higher levels of education ?

Data collection

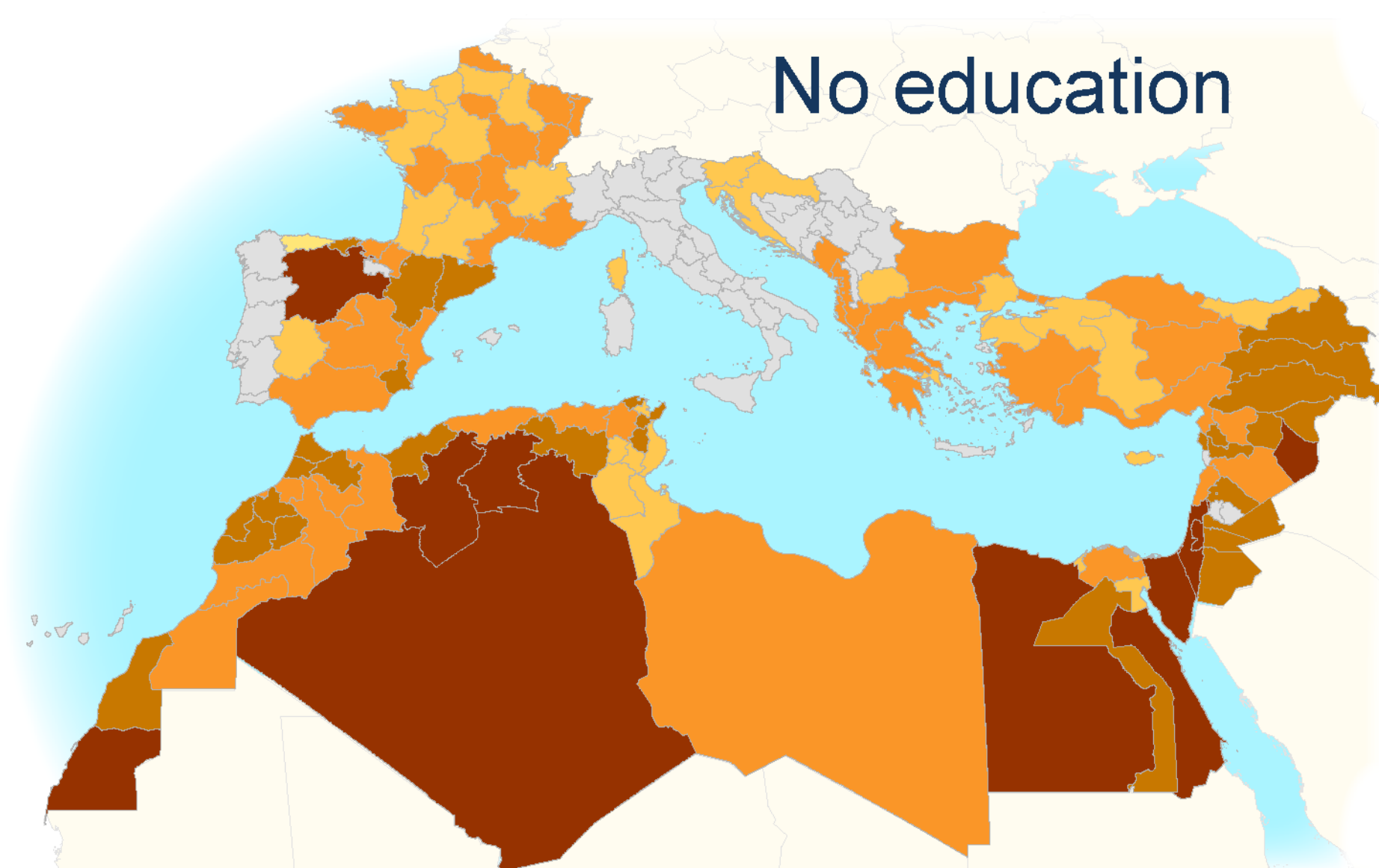
- Total Fertility Rate according to the highest level of educational attainment
- Subnational level: scarcely used data
- Microdata files from:
 - census samples: statistical offices, IPUMS
 - surveys: DHS, MICS, national surveys
- Years from 2000 to 2015

Harmonization process

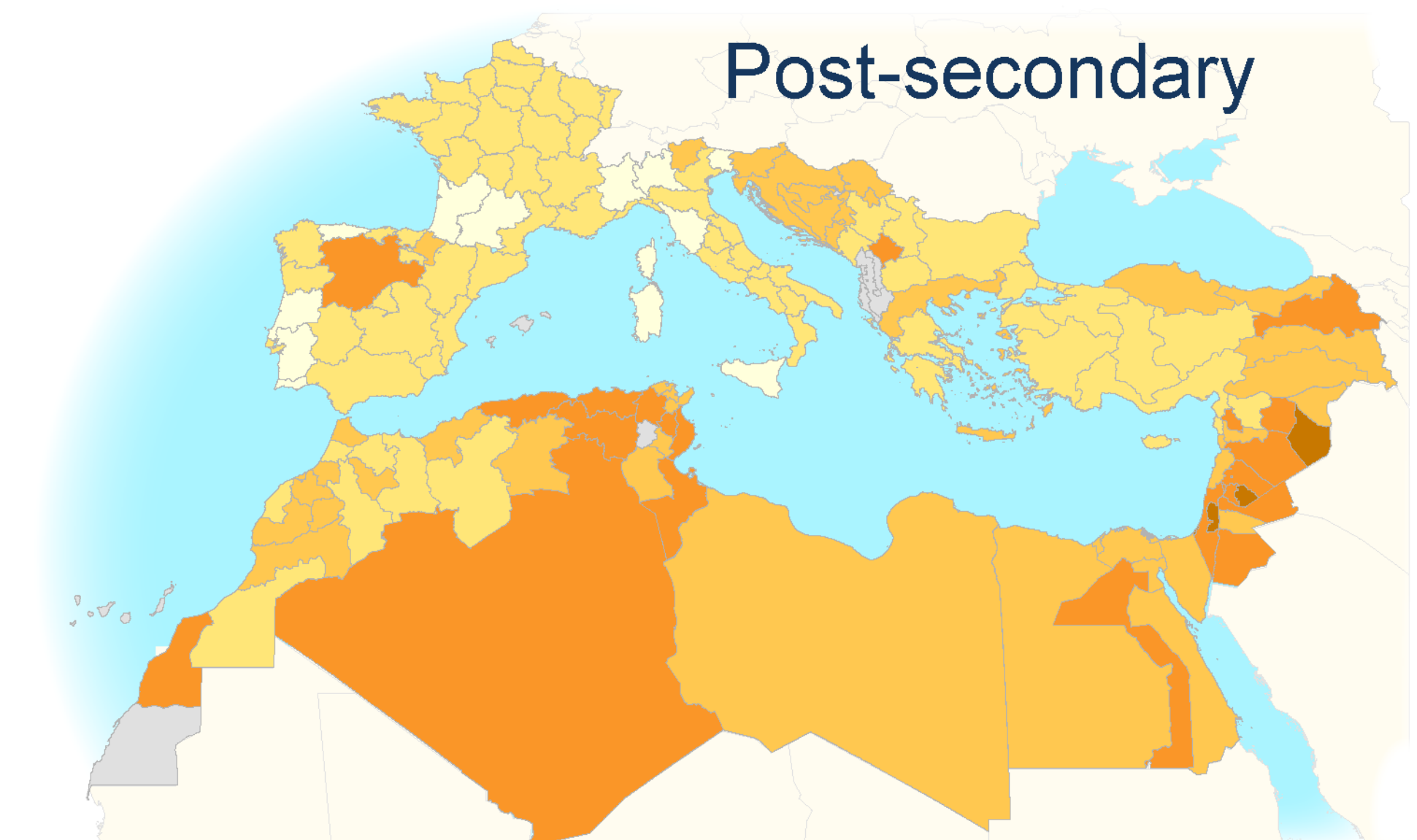
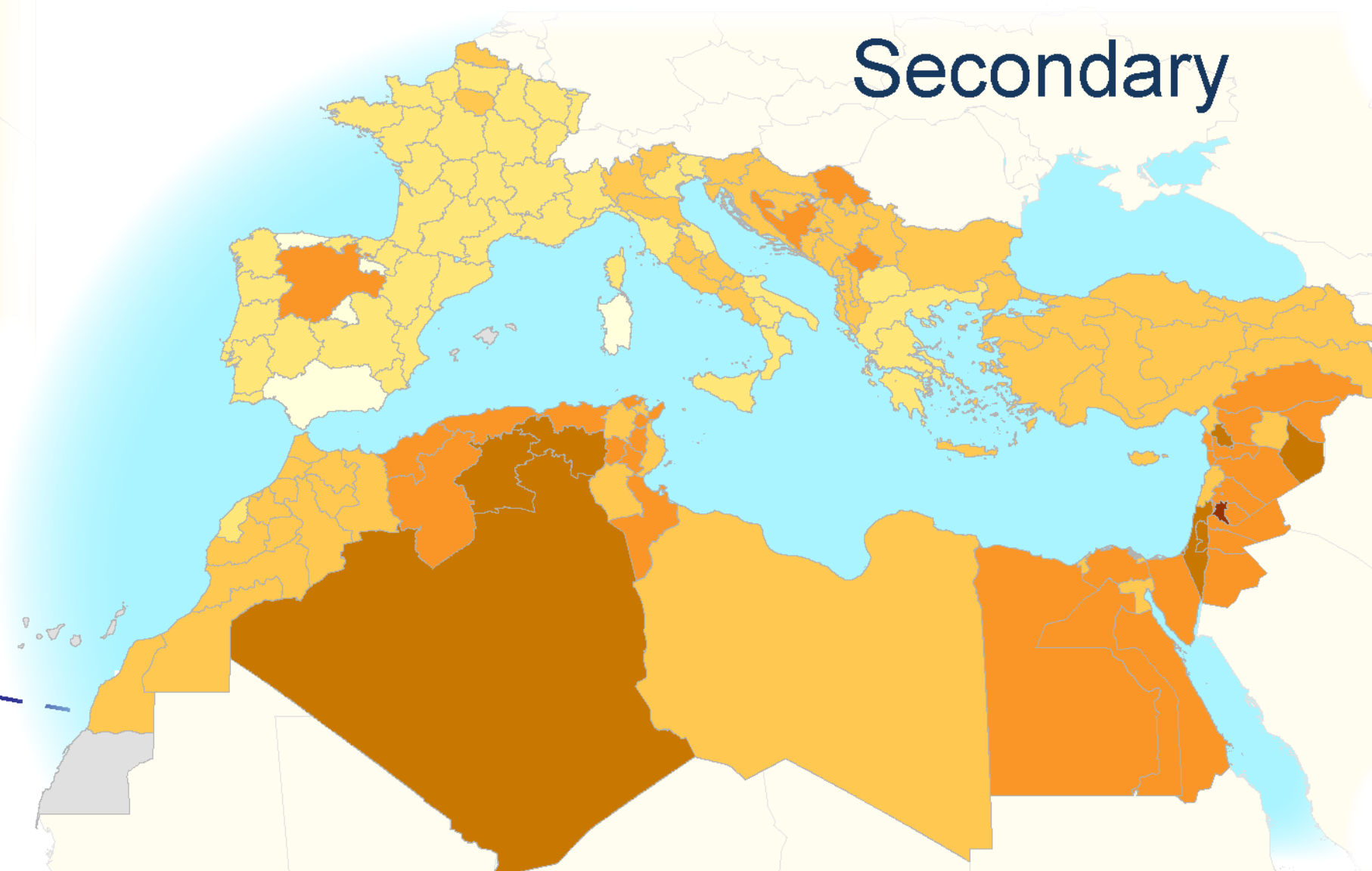
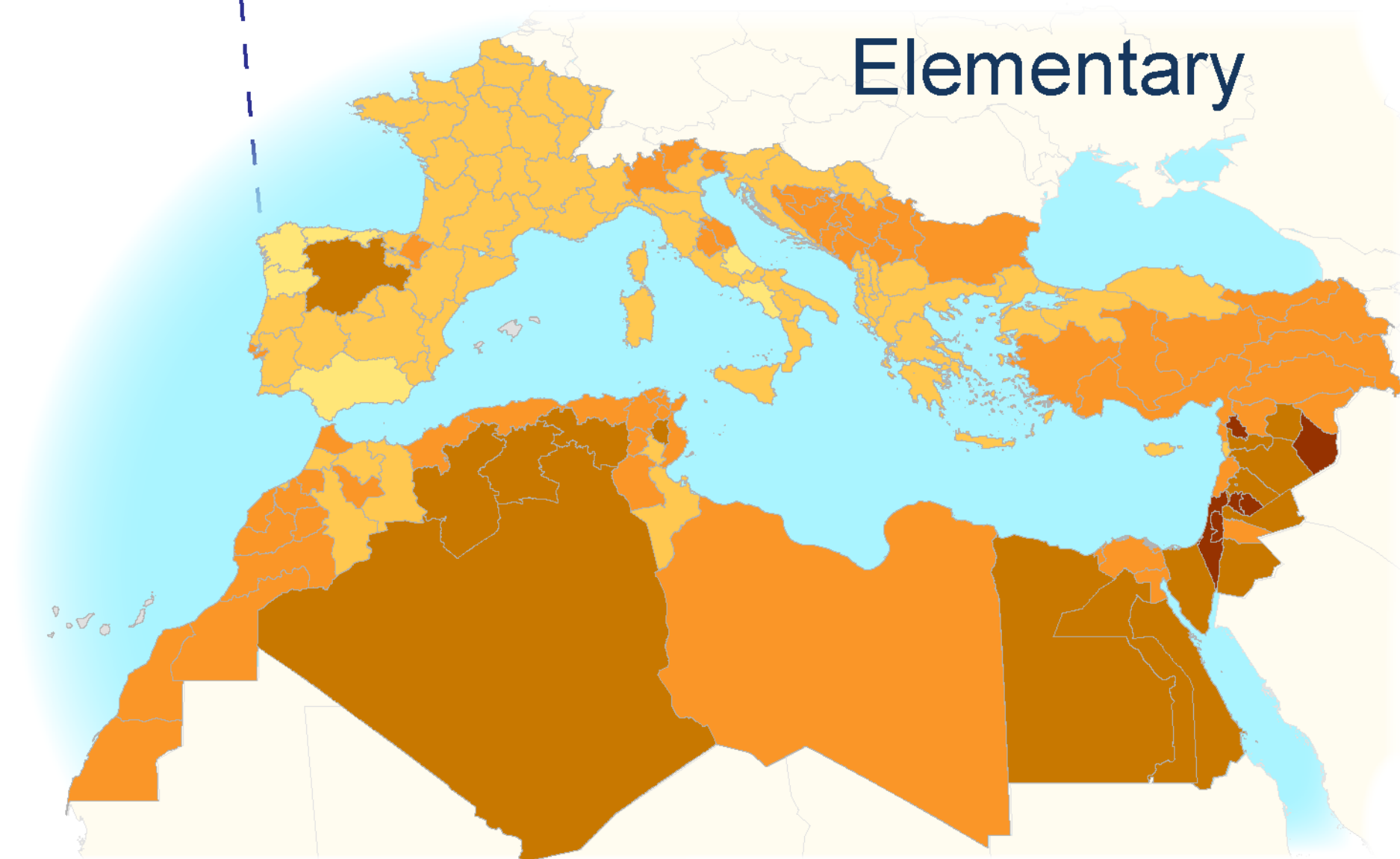
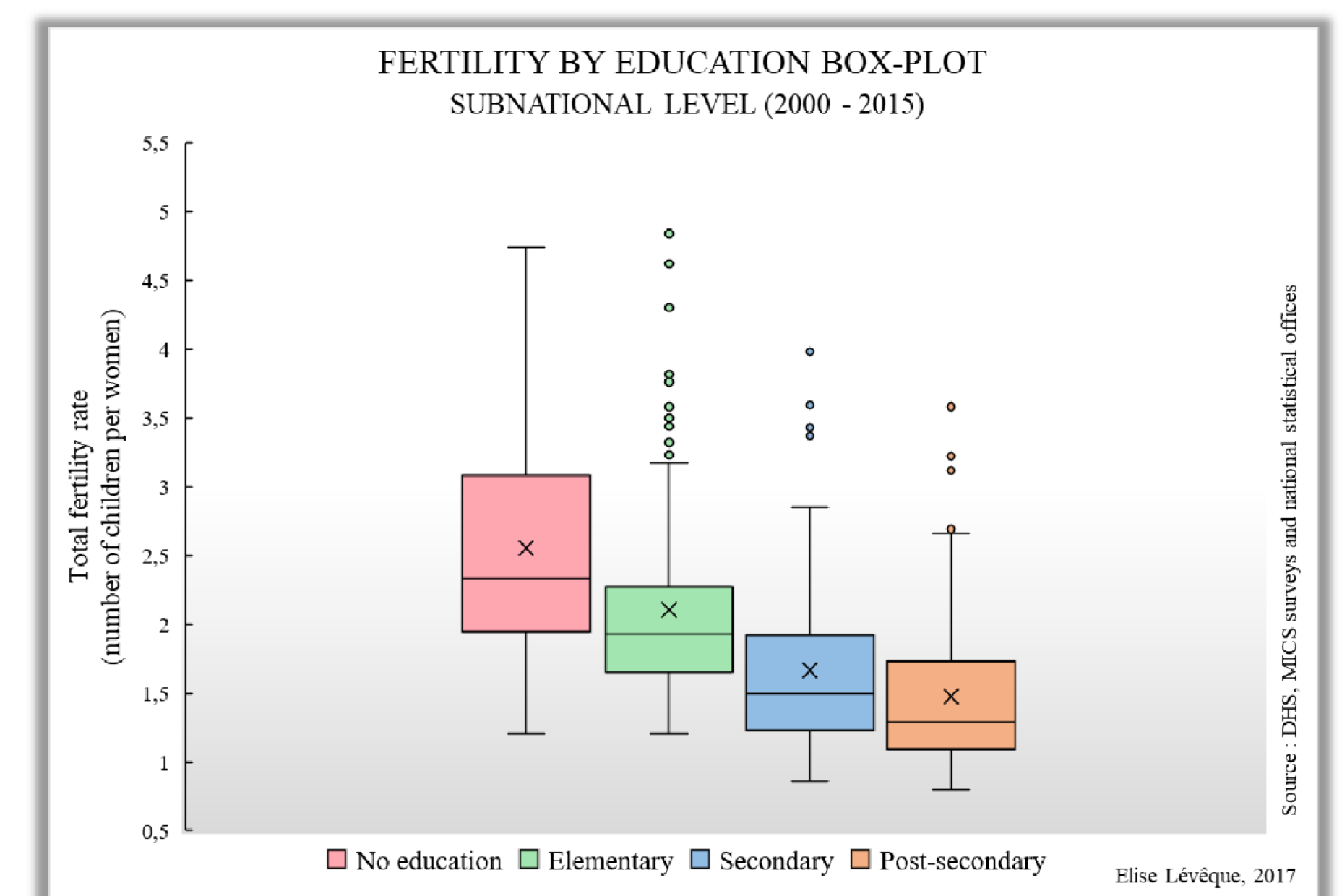


Cartography and statistics

Total fertility rate by level of educational attainment (2000 - 2015)



- Link between lower fertility rates and higher education levels verified at subnational level for all territories
- Spatial continuities reveal cross-border territories with common fertility patterns
- Similar statistical dispersion for all education levels, except for the category «uneducated»



Between different territories, the results reveal an alignment between a narrowing fertility gap and higher levels of education, but there is no evidence of a convergence of fertility rates across Mediterranean territories among educated women.

Fargue's hypothesis should be considered only in the context of Arab transitional countries and not for the whole of the Mediterranean area.

We cannot postulate that all regional patterns are homogeneous only for the most educated women because the territories observed are at different stages of their fertility transition.

Conclusion

In conclusion, we have highlighted the need to exploit demographic and geographic fine-scale data when conducting research in fertility trends. Biases resulting from international comparisons are reduced using the harmonization process. Subnational level comparisons add a new dimension to the traditional diffusion theory by applying a spatial perspective whilst taking into account local discrepancies in the adoption of innovative behaviours. This research leads us to question differential fertility as one of the main predictors of population trends.

Bibliography

- Fargues P., (2000), Générations arabes: l'alchimie du nombre, Fayard.
- Lévêque E., (2017), L'éducation efface-t-elle les frontières ? L'exemple de la fécondité en Méditerranée, Master Thesis of the Aix-Marseille University <dumas-01612919>