S. Dray, D. Chessel, J. Thioulouse : Co-inertia analysis and the linking of ecological data tables. Ecology*, 2003, vol. 84, 3078-3089.*

Erratum

« For these cases, COIA is a good alternative. Another alternative could be to (1) perform PCA on environmental variables to obtain uncorrelated variables and (2) apply CCA between the species matrix and principal axes of the previous PCA. This second alternative provides exactly the same results as COIA of the two original tables except that, unlike COIA, it does not allow one to plot directly the original environmental variables, which have been replaced by their principal axes. In the same way, CANCOR between the principal axes of two tables is equivalent to COIA of the original tables. »

There is an error. As CCA and CANCOR use the Mahalanobis metrics, the previous decorrelation of variables does not influence the results. The right equivalence between CCA, COIA and CANCOR is to say that :

- CCA is equivalent to (1) perform PCA on environmental variables to obtain uncorrelated variables and (2) apply C*OIA* between the species matrix and principal axes of the previous PCA. This second alternative provides exactly the same results as C*C*A of the two original tables except that, unlike C*CA*, it does not allow one to plot directly the original environmental variables, which have been replaced by their principal axes.
- In the same way, COIA between the principal axes of two tables is equivalent to CANCOR of the original tables.