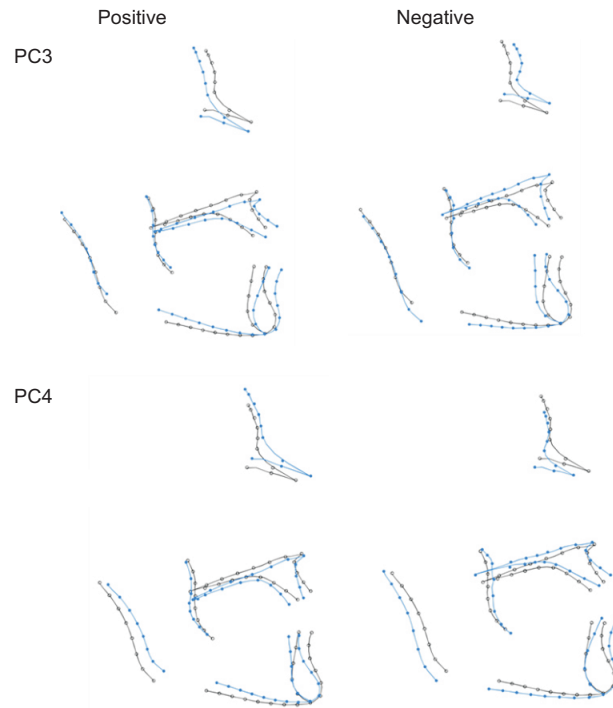


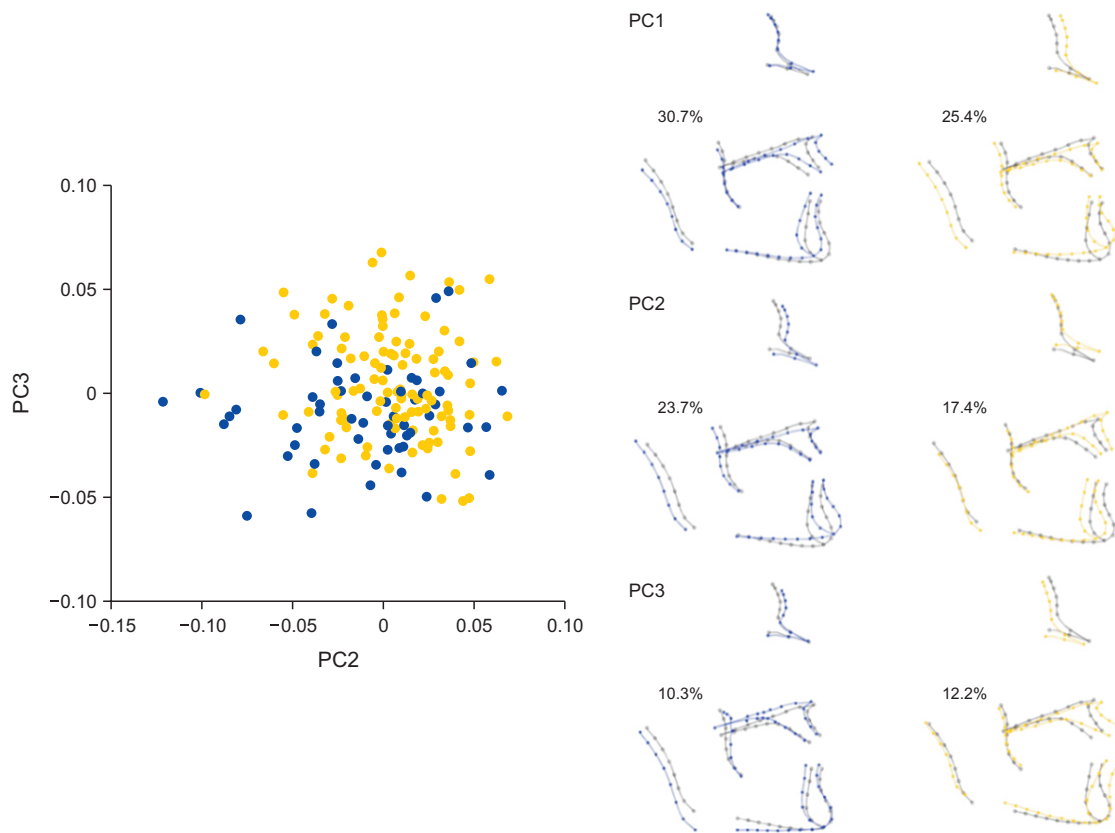
**Supplementary Table 1.** Baseline cephalometric data for the whole sample (n = 159)

	<b>Mean</b>	<b>SD</b>
SNA	81.8	3.9
SNB	78.1	4.7
ANB	3.7	2.8
ArGoMe	120.4	6.7
SN-NL	7.1	3.4
ML-NL	24.4	6.2
SN-ML	31.6	6.5

All means and standard deviations (SD) in degrees.

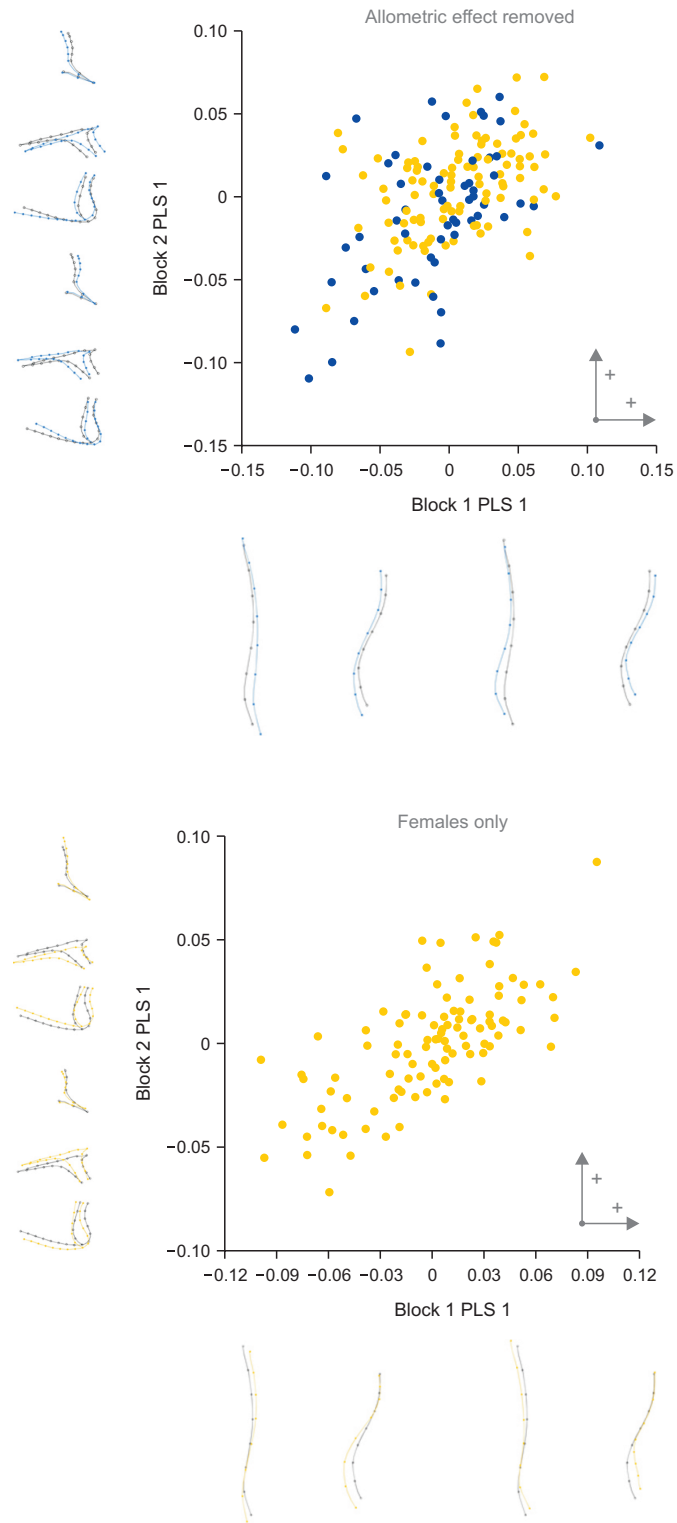


**Supplementary Figure 1.** Shape changes from the average configuration of all individuals according to PC3 and PC4. The average configuration is coloured in black, and changes are depicted in blue. Scaling in the positive and negative directions is at 0.1.  
PC, principal component.



**Supplementary Figure 2.** Some separation between sexes might be evident along PC1 (also refer to Figure 2), PC2, and PC3 (mixed sexes). In the plot, males are represented with blue dots and females with yellow dots. To visualize shape changes according to sex, separate PCAs for males and females were performed. The outline drawings depict only the positive direction of the corresponding PC and sex at a scale of 0.1. The average shape of each group is shown in black, and shape changes are coloured in blue for males and yellow for females. Percentage values correspond to shape variability explained by each PC and group.

PC, principal component; PCA, principal component analysis.



**Supplementary Figure 3.** Plots of PLS 1 explaining 43.7% and 41.9% of the total covariance between the ramus (Block 1) and rest of the face (Block 2) for mixed sexes with the allometric effect removed and for females only, respectively. Blue dots represent males, and yellow dots represent females. Outline drawings show changes at a scale of 0.1. The average shape is depicted in black and shape changes in blue or yellow. PLS, partial least squares.