Graph-based description

Visualization of compartments

Each graph G could be split in connected components $S = (V_S, E_S)$ by deleting all edges $e \in E \setminus E_{\alpha}$ labeled as γ (Figure 1), for which the concave hull was computed using the algorithm by [1]. Then, a cell compartment is defined by the area surrounded of the concave hull.

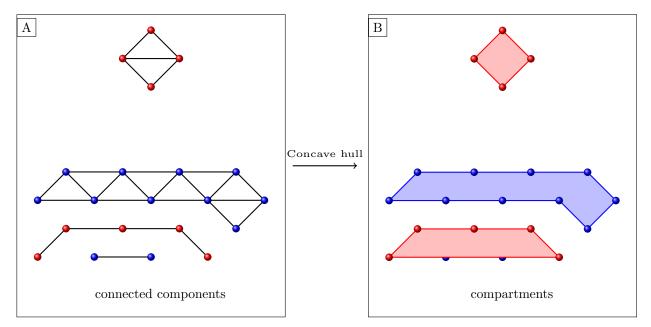


Figure 1: Visualization of compartments: All edges between cells of different phenotype were removed from the neighborhood graphs (see Fig. 42C of main document) and then (A) the graphs were split into connected components of a single phenotype. (B) Visualization by concave hull. Single cells/cell pairs do not span a compartment.

References

[1] Duckham M, Kulik L, Worboys M, Galton A. Efficient generation of simple polygons for characterizing the shape of a set of points in the plane. Pattern Recognition. 2008;41:3224–3236.