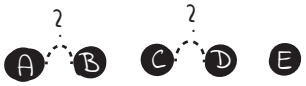
Time Curve

Pitfalls

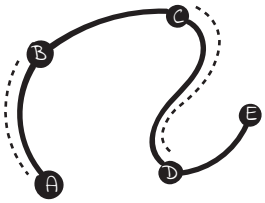
Mistaking curvilinear distance for time

The lengths of the curve segments in-between are a result of the algorithm and does not mean time interval in-between

The snapshots we have of the system may not have been recorded at regular time intervals. The time curve only assumes information about the order of time points.

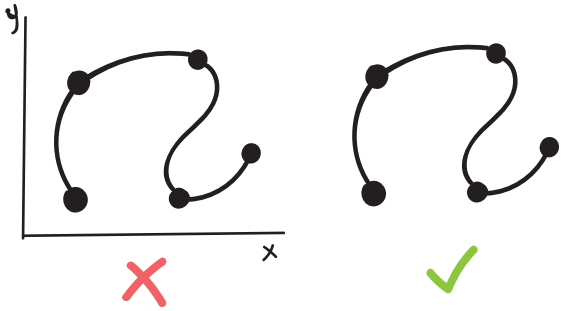


The curve lengths between points therefore say nothing about relative time duration.

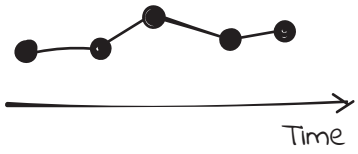


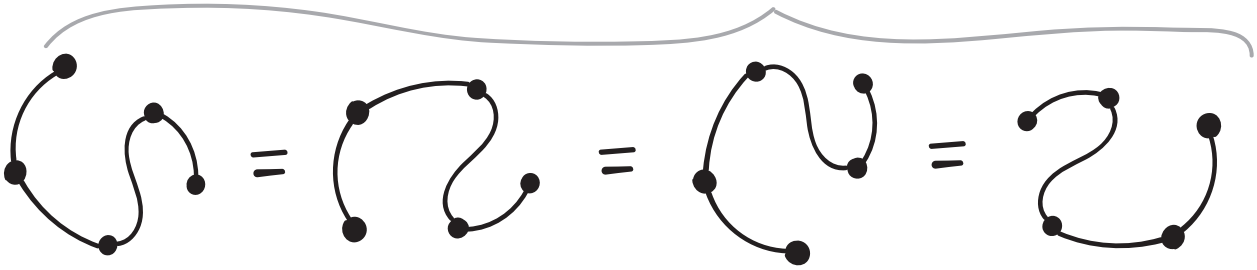
Attach meaning to the axes

The space that the time curve inhabits does not have axes.



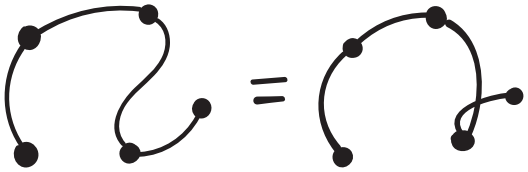
only for linear process is it possible to orient the curve so that it aligns with the left-to-right direction of time.





Over-interpreting intersections

whether a curve self-intersects or not depends on the particular algorithm.



Not understanding the similarity metric

The interpretation of the time curve depends critically on the meaning of the similarity metric.