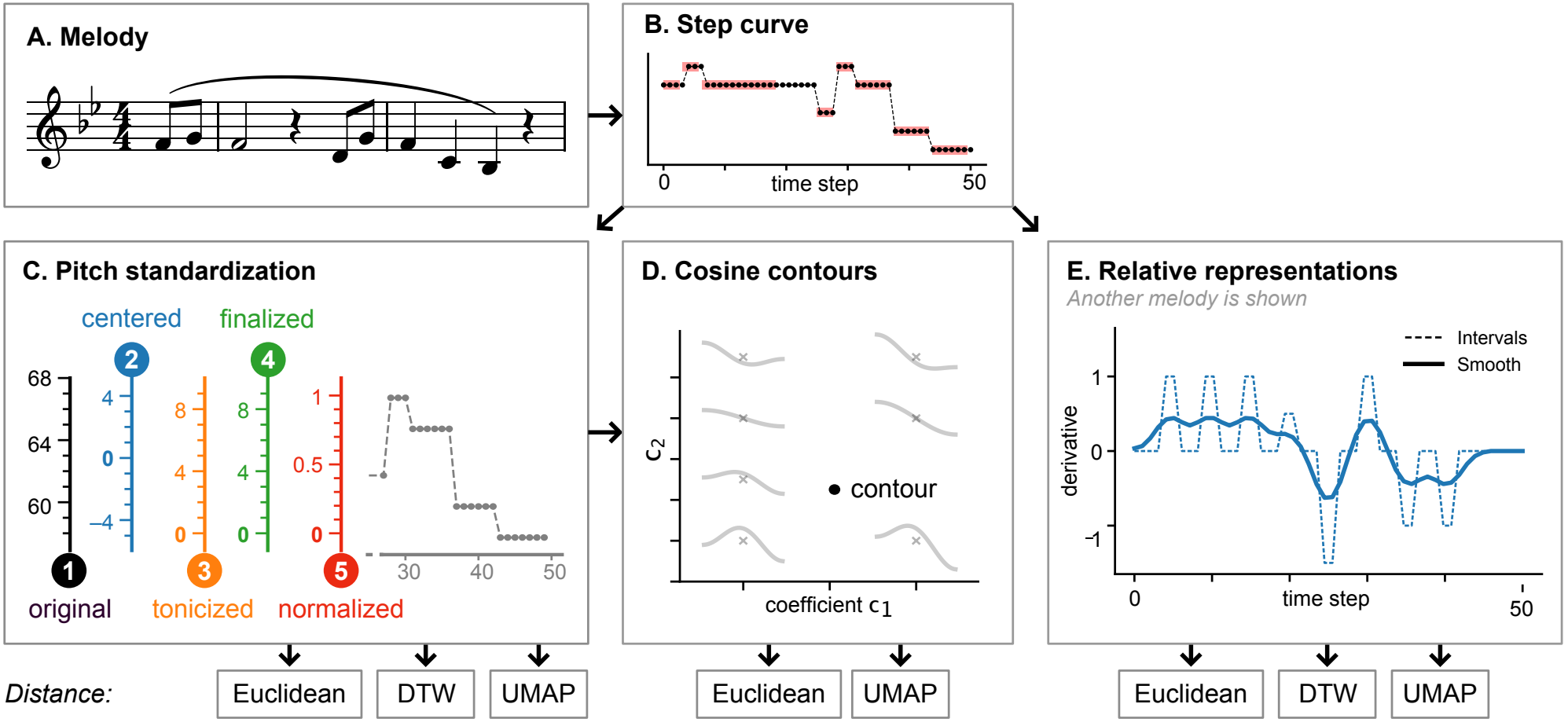
A. Melody
B. Step curve
0
time step
50
C. Pitch standardization
centered
finalized
68
64
60
4
0
−4
8
4
0
8
4
0
1
0.5
0
30
40
50
original
tonicized
normalized
D. Cosine contours
c_2
contour
coefficient c_1
E. Relative representations
Another melody is shown
Intervals
Smooth
derivative
1
0
−1
0
time step
50
Distance:
Euclidean
DTW
UMAP
Euclidean
UMAP
Euclidean
DTW
UMAP