

Figure 1: ARI spectral clustering score as a function of the noise on the example of three Gaussian clusters with varying variance : σ^2 , $2\sigma^2$ and $3\sigma^2$ (as in figure 2 in the main paper).



Figure 2: Dimensionality reduction scores as a function of the perplexity parameter.

	t-SNE			t-SNEkhorn		
	Affinity	Embedding	Total	Affinity	Embedding	Total
COIL OLIVETTI UMNIST	$\begin{array}{c} 0.38 \pm 0.01 \\ 0.07 \pm 0.02 \\ 0.12 \pm 0.01 \end{array}$	$\begin{array}{c} 5.28 \pm 0.17 \\ 0.96 \pm 0.02 \\ 4.27 \pm 0.05 \end{array}$	$\begin{array}{c} 5.66 \pm 0.17 \\ 1.03 \pm 0.03 \\ 4.39 \pm 0.05 \end{array}$	$\begin{array}{c} 13.02 \pm 0.34 \\ 0.26 \pm 0.02 \\ 1.77 \pm 0.03 \end{array}$	$\begin{array}{c} 13.39 \pm 0.07 \\ 2.42 \pm 0.08 \\ 8.50 \pm 0.16 \end{array}$	$\begin{array}{c} 26.41 \pm 0.35 \\ 2.68 \pm 0.08 \\ 10.27 \pm 0.16 \end{array}$

Table 1: Timings (in seconds) for t-SNE and t-SNEkhorn.

Table 2: Silhouette scores with varying dimensions for the pre-processing PCA step.

	t-SNE			t-SNEkhorn		
Dim. PCA	30	50	70	30	50	70
COIL OLIVETTI UMNIST	$\begin{array}{c} 31.2 \pm 3.1 \\ 3.9 \pm 1.2 \\ -0.1 \pm 1.9 \end{array}$	$\begin{array}{c} 30.7 \pm 6.9 \\ 4.5 \pm 3.1 \\ -0.2 \pm 1.5 \end{array}$	$\begin{array}{c} 30.2 \pm 4.2 \\ 4.4 \pm 2.7 \\ -0.2 \pm 1.5 \end{array}$	$\begin{array}{c} 52.6 \pm 1.3 \\ 15.2 \pm 1.8 \\ 26.1 \pm 4.6 \end{array}$	$\begin{array}{c} 52.3 \pm 1.1 \\ 15.7 \pm 2.2 \\ 25.4 \pm 4.9 \end{array}$	$\begin{array}{c} 51.8 \pm 0.9 \\ 15.5 \pm 1.2 \\ 23.1 \pm 3.8 \end{array}$