

Supplementary Material for  
“Analysis of High-Dimensional Data  
Using Local Input Space Histograms”

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November 14, 2014

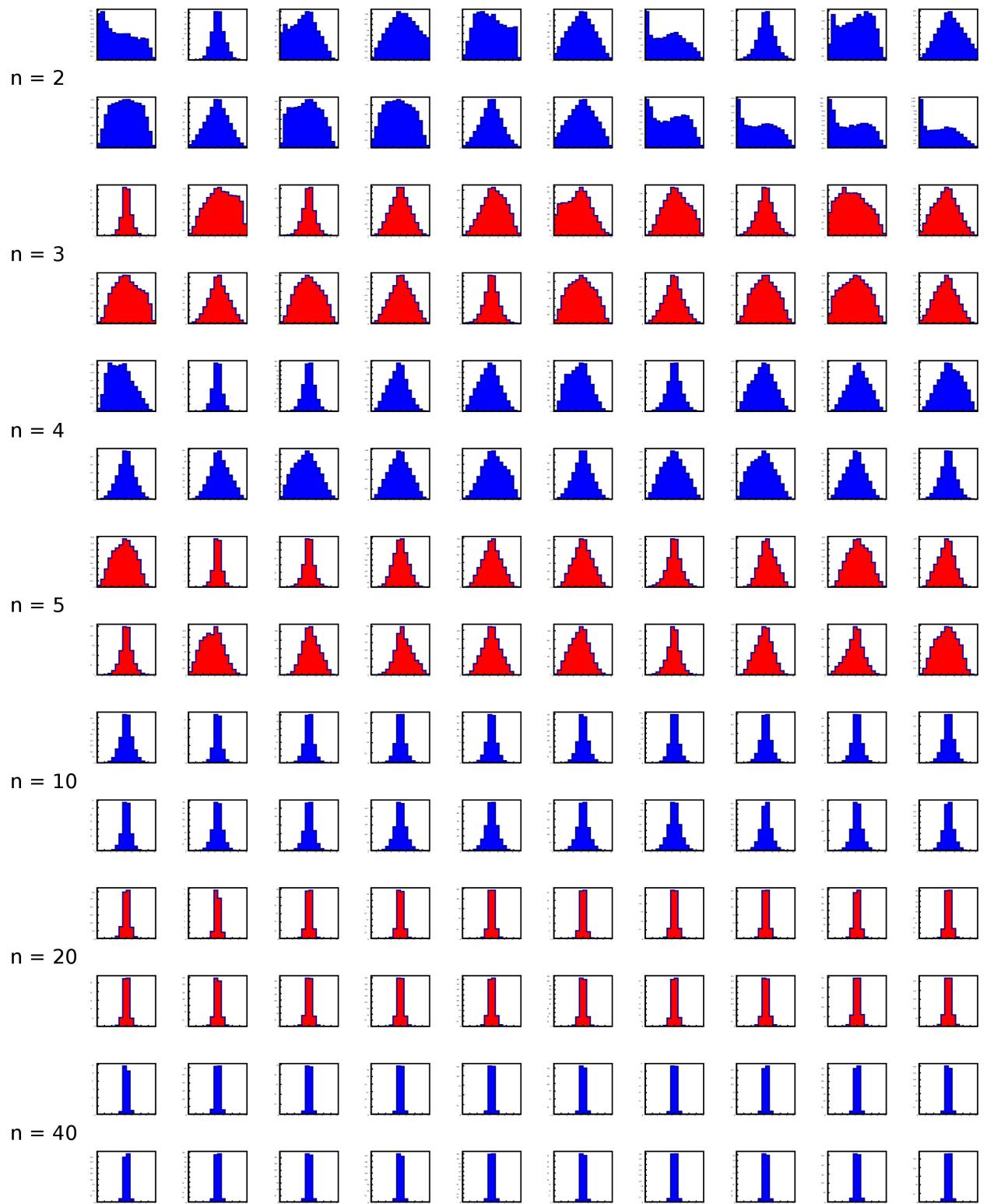


Figure S1: Comparison of local input space histograms of GNGs with 50 units, fixed Minkowski parameter  $p = 2$ , and increasing dimensions  $n$  of input space.

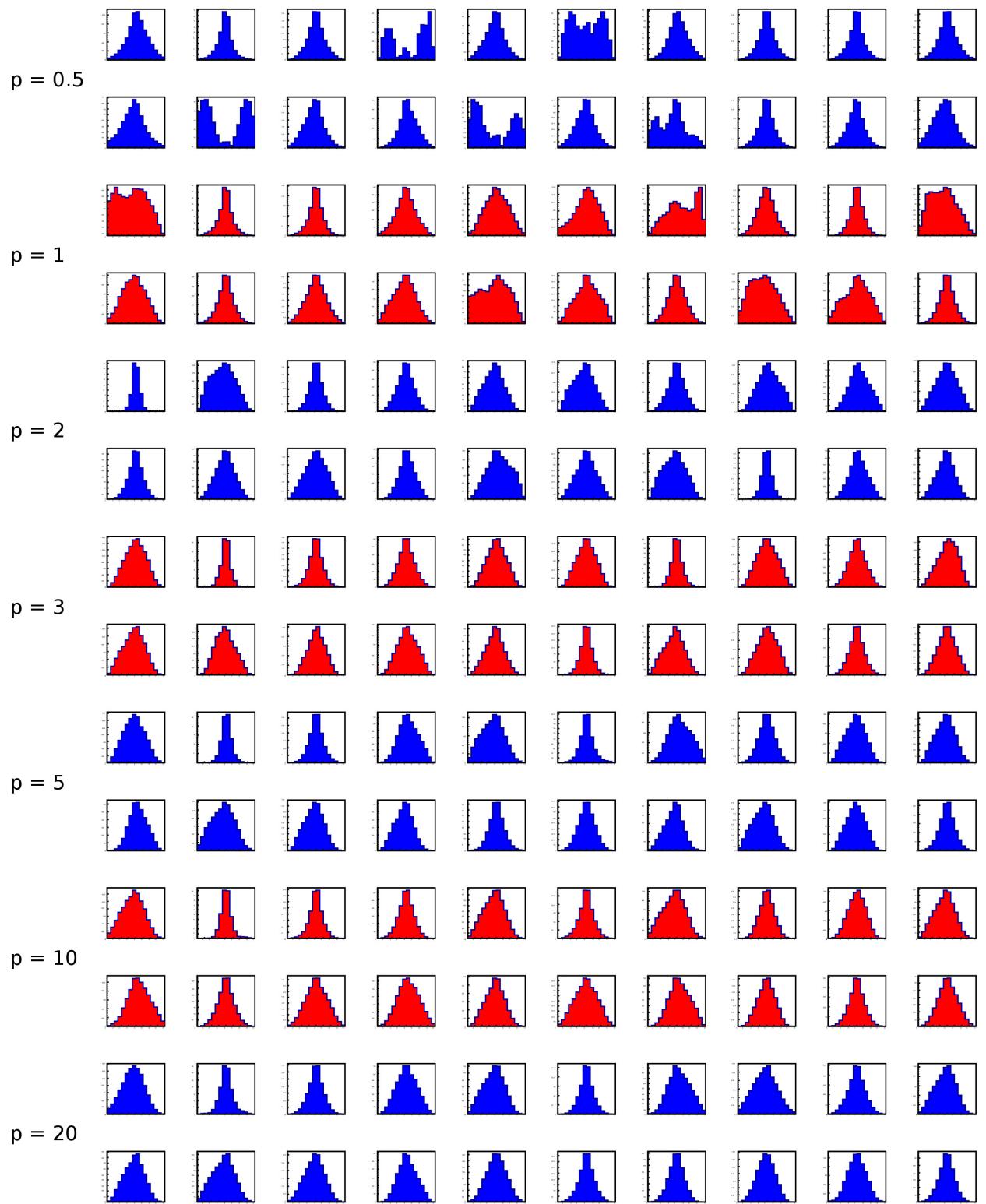


Figure S2: Comparison of local input space histograms of GNGs with 50 units, random 4-dimensional input, and increasing values for the Minkowski parameter  $p$ .

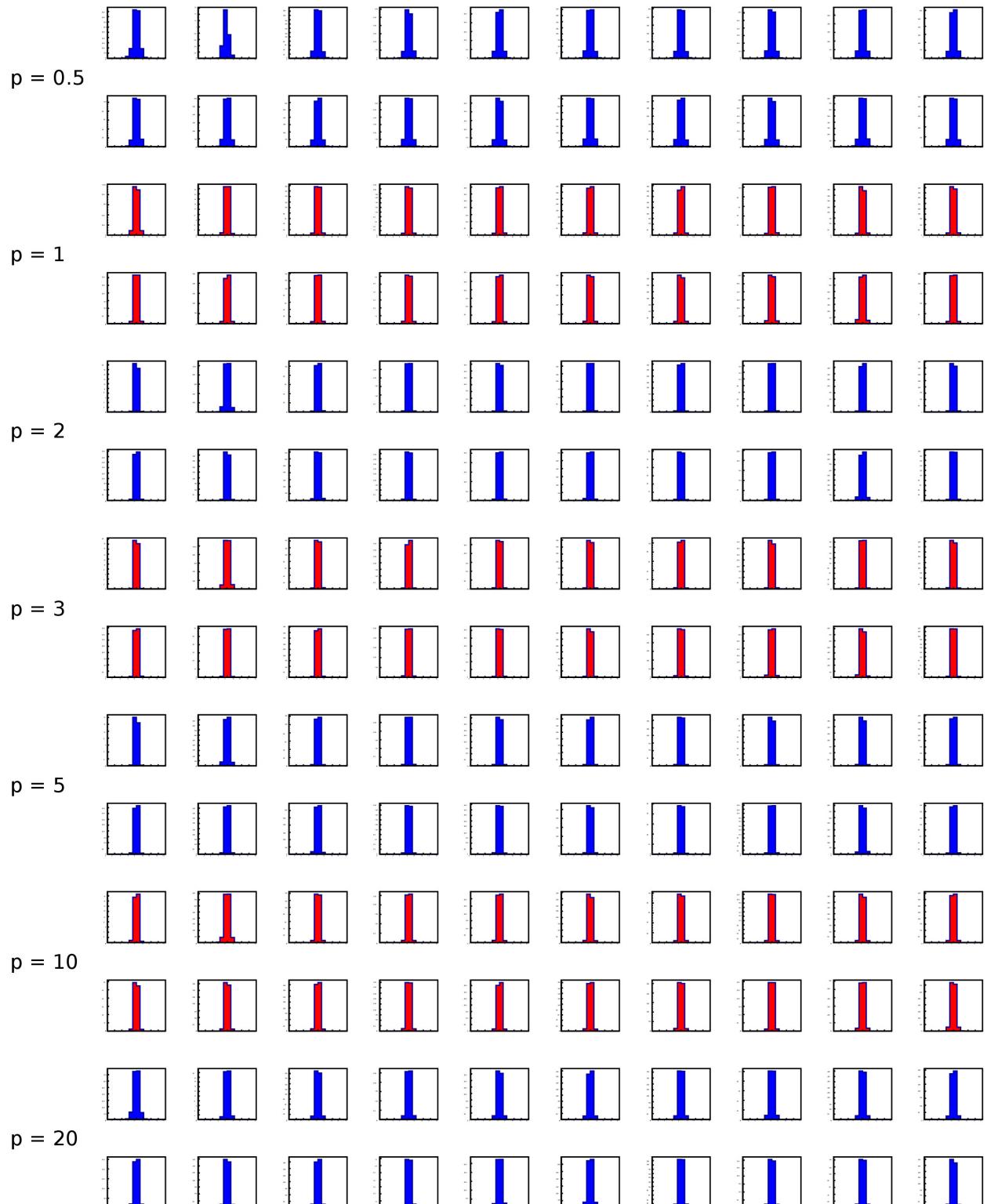


Figure S3: Comparison of local input space histograms of GNGs with 50 units, random 64-dimensional input, and increasing values for the Minkowski parameter  $p$ .

distribution of distances between units,  $n = 64$

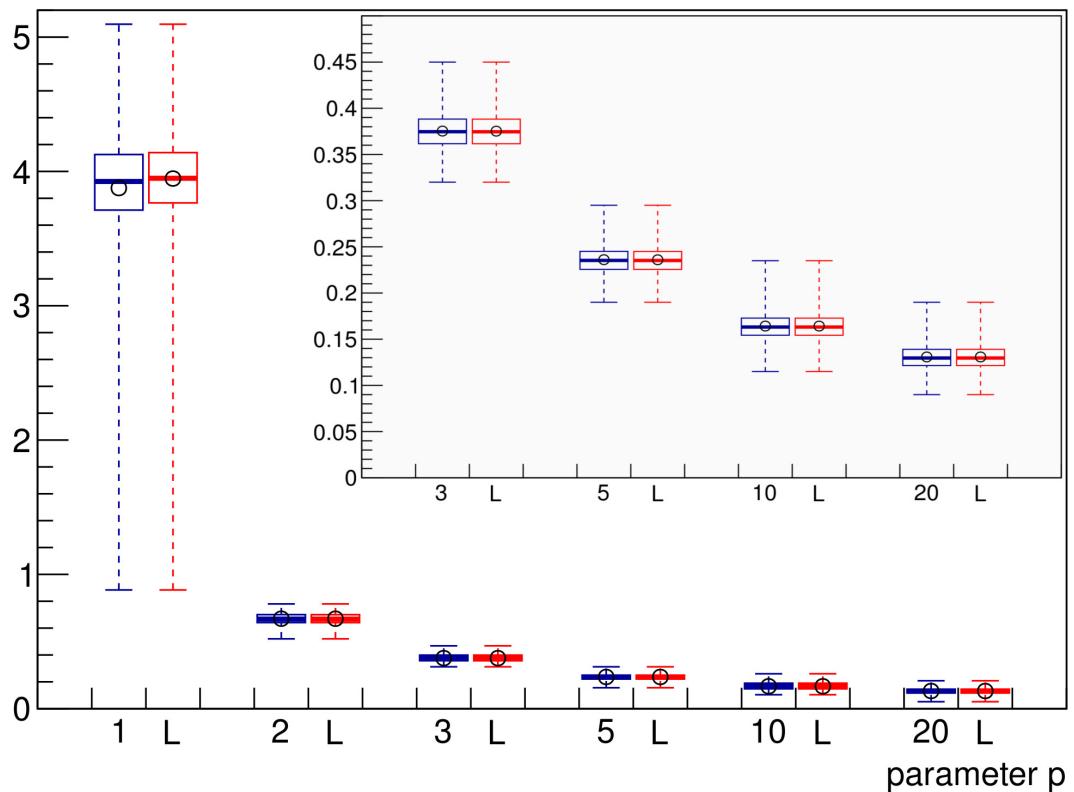


Figure S4: Box plot of the distributions of pairwise distances between the units of GNGs with fixed input space dimension  $n = 64$  and varying Minkowski parameters  $p$ . Blue boxes describe the pairwise distances between all units, red boxes ( $L$ -columns) describe the pairwise distances between all units connected by edges. Circles represent the mean values of the distributions. Inset: Magnification of entries for  $p = \{3, 5, 10, 20\}$ .

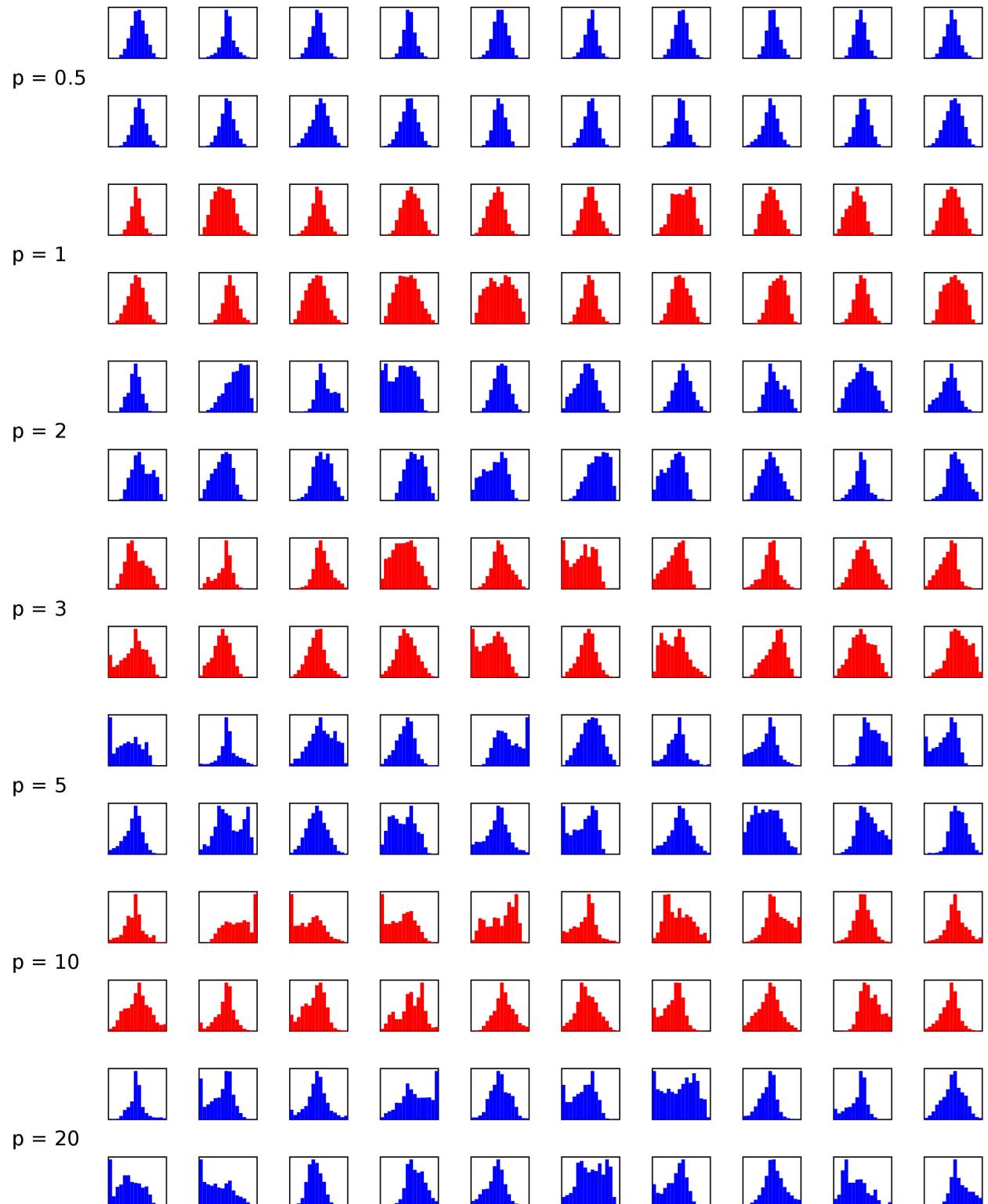


Figure S5: Comparison of local input space histograms of GNGs with 50 units, 64-dimensional color histogram input, and increasing values for the Minkowski parameter  $p$ .

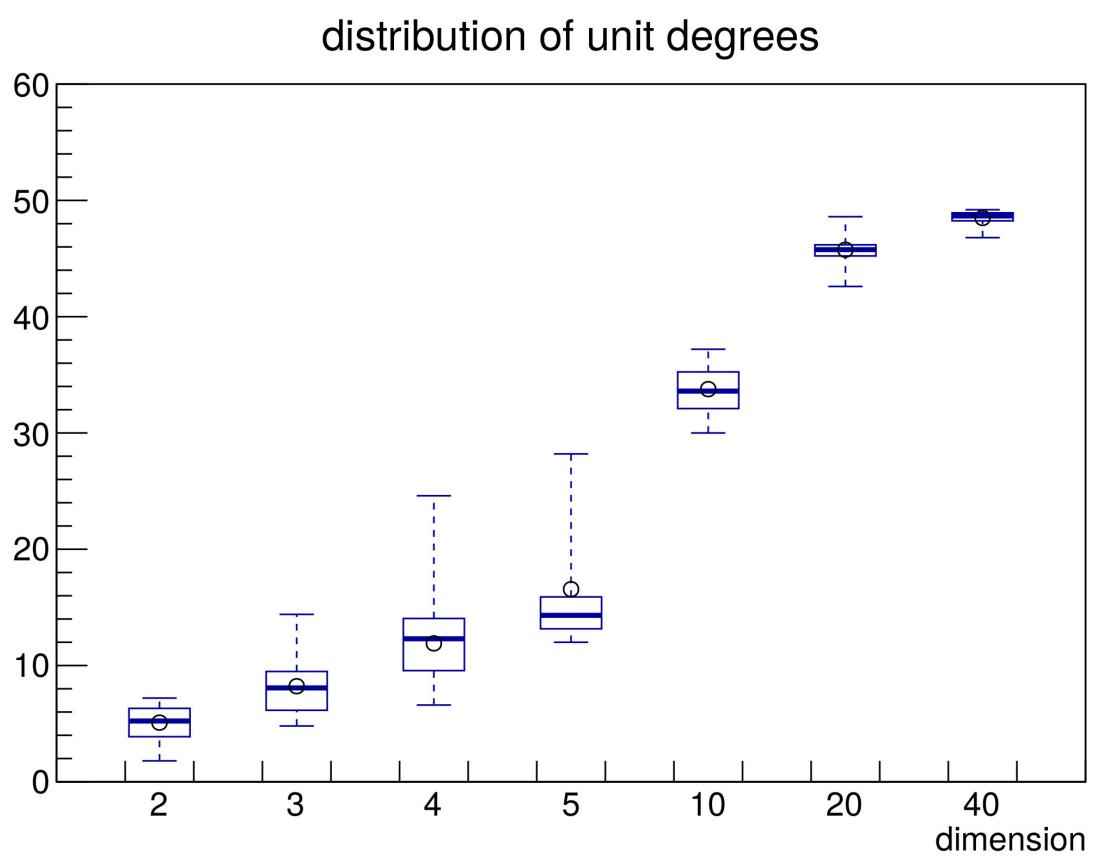


Figure S6: Box plot of the distributions of unit degrees of GNGs with 50 units, random input with increasing dimension, and fixed Minkowski parameter  $p = 2$ .

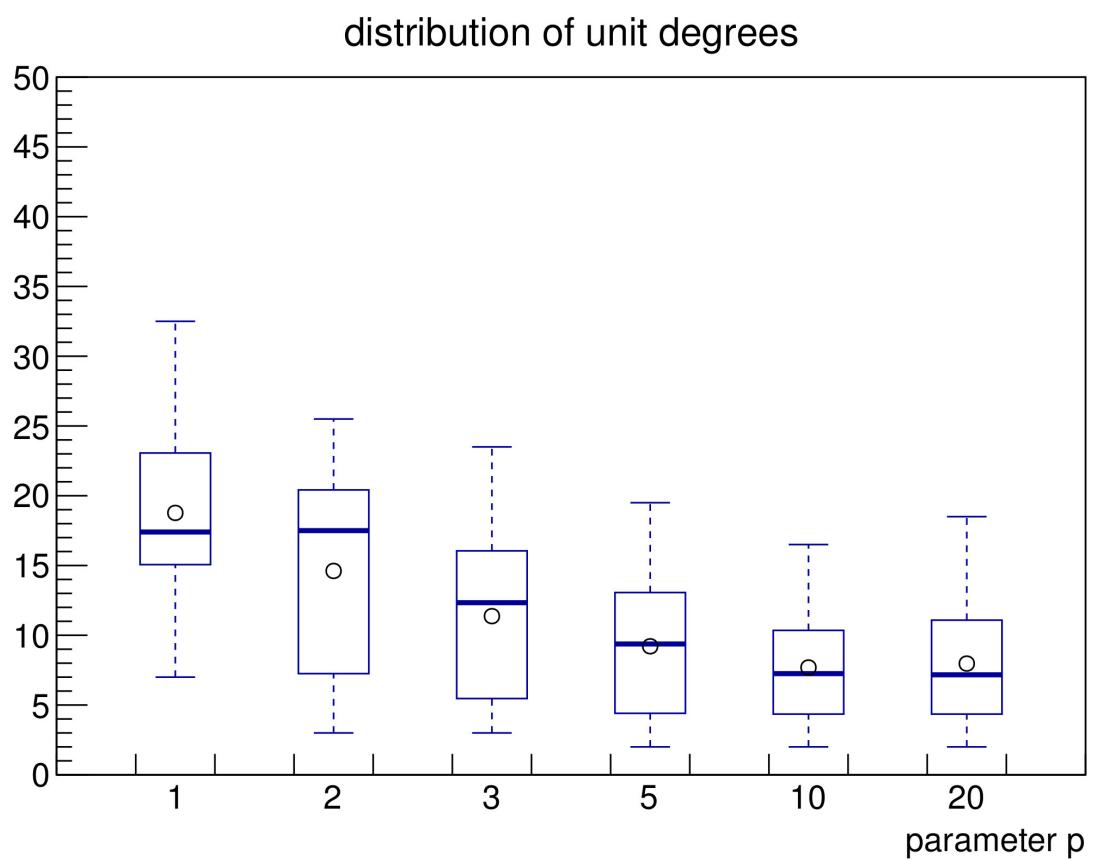


Figure S7: Box plot of the distributions of unit degrees of GNGs with 50 units, 64-dimensional color histogram input, and increasing values for the Minkowski parameter  $p$ .



Figure S8: Mapping of closest input images to corresponding GNG units.